DOCTORAL RESEARCH IN EDUCATION[illegible] ADMINISTRATION AT THE UNIVERSITY OF ALBERTA, 1958-1991

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PREFACE

In educational administration, as in other fields, the major criteria applied in the evaluation of a doctoral thesis revolve around the extent to which the research constitutes a contribution to knowledge. To ensure that the essential criteria are satisfied to an acceptable degree, candidates for the doctorate invest substantial amounts of time and energy in doing their research. Universities also allocate considerable resources to helping candidates prepare to do research, to supervising the process and to evaluating the outcomes. My casual observations about the way in which doctoral research is generally regarded in the field of study suggest that the value eventually placed on the outcomes is not commensurate with the resources invested in ensuring that the research leads to advances in knowledge. Completed doctoral research appears to be undervalued not only by established researchers but also by numerous doctoral candidates who seem more ready to strike out into uncharted territory than to continue explorations initiated by their predecessors.

Perhaps one reason why doctoral studies in educational administration do not hold a higher status is that they are seldom compiled or integrated in a manner that ensures visibility and facilitates systematic knowledge building. By consolidating the research conducted by doctoral candidates at the University of Alberta, I attempted to achieve two main objectives. The first was simply to establish a record of the research that was completed over a thirty-three year period in the history of the Department. Recording the research in this way assumes particular significance because until 1987 the abstracts were not published in *Dissertation Abstracts International*. The second objective was to integrate the research in a manner that might increase the sensitivity of other doctoral candidates to the merits of linking their studies more closely to those of their predecessors in order to develop evolving lines of research. Since this review is limited to a particular set of studies, the lines of research identified are illustrative only and are not presented as being definitive. A third objective might also be added: to prompt colleagues in other universities to consider undertaking similar integrations of doctoral research.

The project was carried out over a longer period than I had anticipated initially. Due to various distractions the work was placed "on hold" a number of times. In retrospect, extending the time period covered by the review may have been fortuitous. The longer period provided a clearer indication of trends than would have been evident a few years previously. Although the added diversity created greater challenges with respect to achieving integration, a number of substantive themes became more fully developed. During the latter stages of the project there were indications that these are times of significant change both in the field of study and in the institutional context of doctoral programs. Perhaps when viewed from a future point in time, the period covered by the review may have particular importance in the development of doctoral studies in educational administration at the University of Alberta.

I wish to acknowledge the financial support for the project provided by the Faculty of Education Scholarship and Research Awards Committee from the University's Endowment Fund for the Future. Initial work on the project began during tenure of a McCalla Research Professorship. A subsequent Support for the Advancement of Scholarship Fund research grant provided funds for publishing the report. The awards provided not only the opportunity but also the incentive to initiate and later to bring the project to completion. To the colleagues and graduate students who reacted to the first draft of the manuscript, I express appreciation for their helpful comments.

A report such as this does not require a dedication. Nevertheless, I would like to dedicate the monograph to the doctoral graduates whose studies are the subject of the review. I was generally familiar with the nature and quality of the research before undertaking the project; however, my previously favorable impression of the significance of the research was strengthened during the review process. The 330 theses collectively constitute a noteworthy contribution to research in educational administration. Indeed, from my less than objective stance, the contribution appears to be impressive. I trust that readers of this monograph will come to a similar conclusion.

E. M.
June, 1992

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Introduction

Research conducted by graduate students in fulfillment of degree requirements constitutes a major part of the total research effort in the study of educational administration. Within the graduate research area, doctoral studies in particular have potential for making a significant contribution to the further development of the field of study. Although some doctoral research is published, many of the studies do not attain the degree of visibility necessary to ensure that they come to the attention of other researchers or that they are included in research reviews. As a consequence, the potential contributions of doctoral studies to research in specific areas and to the field in general are seldom realized. In addition, collectively doctoral studies offer a perspective on the general nature of educational administration research. Considerations such as these prompted the project on which this report is based.

Purpose and Rationale

The general purpose of the project was to develop an overview and a synthesis of the doctoral theses completed in the Department of Educational Administration at the University of Alberta from 1958 to 1991. Among the more specific objectives that guided the project were the following:

1. to describe the general characteristics of the research methodologies used in the studies;
2. to search for trends in the use of research methodologies;
3. to identify the major research areas and substantive themes in the studies;

4. to summarize the outcomes of the studies in relation to major research areas and themes; and,

5. to use the results of the review as the basis for commenting on possible future emphases in doctoral studies.

The decision to engage in a review of this set of doctoral theses was based on the assumption that the significance of the overall research effort, and of individual studies, would be enhanced by developing retrospectively a programmatic perspective on the research. Given that more than three hundred theses were completed during the thirty-three year period covered by the review, an attempt at synthesis seemed timely. The timeliness of the project appeared to be supported by observations in the literature about the state of research in the field generally.

Commentaries on the state-of-the-art of research in educational administration tend to point to some persistent challenges. A major problem that has been identified is the lack of systematic knowledge building. Research in educational administration appears not to be as cumulative as would be desirable; connections between studies and across lines of research are inadequately developed. The major areas of research and the boundaries of the field are not clearly defined. Few theoretical or practical problems in any particular area of study have been addressed effectively. In the views of a number of observers, increasing diversity and fragmentation are barriers to developing the field of study.

Inadequate attention to methodological considerations has been identified as a barrier to improving the quality of the research. In spite of the numerous studies conducted in educational administration, the literature that relates directly to research methodologies is fairly limited. Researchers tend to rely heavily on conceptual and methodological advances in other fields. Few books intended specifically for use in research courses in educational administration have been published. One consequence is that doctoral studies, in particular, come in for a considerable amount of criticism in reviews of research.

The project was designed to address in a limited way some of these general challenges as they relate to one type of research. Developing an overview and a synthesis of doctoral studies explores possibilities for reducing some of the fragmentation that characterizes research in general. The attempt to organize the outcomes of studies in terms of substantive areas and themes provides a test of the prospects for establishing greater continuities in the research. An examination of the characteristics of the research and of trends offers a perspective on the nature of the methodologies emphasized in the field of study.

In some respects, the project was a form of case study of research in educational administration that yields insights into the way in which research has developed in a particular context and may suggest directions for further developments.

Nature of the Review

As has been indicated, the focus of the project was on the doctoral theses completed in the Department from the time of the submission of the first thesis in 1958 until the end of 1991. In effect, the review covers the first thirty-five years of doctoral studies in educational administration at the University of Alberta. All but one of the 330 theses were submitted in fulfillment of the requirements for the Doctor of Philosophy degree; the exception was a Doctor of Education thesis submitted in 1961. Subsequent to that date, the Department suspended the Ed.D. program for nearly thirty years and awarded only the Ph.D. degree. In 1991, the first candidates were admitted to a revised Ed.D. program.

The number of theses submitted in any one year varied but, after the first decade, averaged about ten or twelve per year. In five-year intervals -- after an initial four-year period -- these are distributed as follows:

1958 - 1961	9
1962 - 1966	23
1967 - 1971	53
1972 - 1976	49
1977 - 1981	68
1982 - 1986	59
1987 - 1991	69
Total	330

The highest number of graduates in any one year was twenty-one in 1988. Previous to that year, the highest number was seventeen attained in 1968, twenty years earlier.

The approach that was adopted to pursuing the objectives of the project involved identifying a number of aspects of each thesis including the problem statement, the conceptual basis of the study, the research methodology used and the major findings or results. In each of these areas, categories that reflected the characteristics of the studies were established. Although the analysis was influenced to some degree by *a priori* categories, the general approach was one of trying to organize the data in a manner that would provide a meaningful representation of the nature of the research.

A number of limitations reside in the way in which the project was designed and the review was conducted. Unlike most reviews, which tend to focus on a particular topic or theme and draw on various sources, the review was intended to provide a perspective on all doctoral theses completed over a thirty-three year period. As a consequence, the review touches on numerous topics or themes only to the extent and only in the manner that the area has been researched by doctoral candidates. The ways in which the studies relate to established conceptualizations and lines of research are not consistently recognized explicitly. Within the graduate studies area, the research conducted by master's candidates, of which there is a substantial amount in the Department, is not included. The addition of master's research to the review would have presented a more comprehensive and perhaps a less fragmented view of graduate research in this particular context.

All research merits critical examination; however, in this case the critical reviews are left to those who may wish to examine aspects of the research more closely. The review is intended to present a fair but also a positive perspective on the studies. Approximately equal weight is given to each thesis regardless of variations in scope and substance. Research problems and strategies change over time; some of the changes may reflect an evolutionary development while others may reveal discontinuities. In spite of efforts to remain sensitive to trends and changes, the review was influenced by the assumption that research activity and research results are more cumulative than appears on the surface. As a consequence, the presentation may emphasize continuities and relatedness to a degree that minimizes the discontinuities and significant changes in direction. More generally, the review reflects the perspective of a particular reviewer. Another reviewer would, no doubt, have chosen a different way of describing the characteristics of the research and of summarizing the studies.

As is the case more generally, the studies reviewed were influenced by the context in which the research was conducted. Important elements of the context include the intellectual traditions of the field of study, the broader arena of research, the characteristics of a particular institution, and the characteristics and circumstances of the specific researchers. Although not all of these can be discussed in detail, some elements of this context for the doctoral studies in this review warrant closer examination.

Context of the Research

As has often been observed, educational administration was an area of professional practice long before programs leading to graduate degrees in the specialization were established. The history of the doctoral program at the University of Alberta follows a familiar pattern. Although specific courses in educational administration had been offered for some time, master's and doctoral programs emphasizing specialized study were initiated only in 1956 with the creation of a Division (later Department) of Educational Administration. The Division had a mandate that included, among other elements, developing a program of doctoral studies designed to serve prospective students from across Canada. In the absence of established traditions within Canada, the general context of the field of study in the United States was influential in setting initial directions for the program.

General Developments

The establishment of the doctoral program at the University of Alberta coincided with the emergence of some significant ideas about the nature of the study of educational administration. Although many of the ideas had earlier origins, they began to have an evident impact on the design of administrator preparation programs and research in the latter part of the 1950s. The characteristics of this emphasis and subsequent reactions have provided the major external influences on the nature of doctoral research in the Department.

Although the emerging emphases in the 1950s warrant particular attention, these developments were taking place within an established definition of the field of study. In general, the ideas developed within a context that reflected close linkages between the study of administration and the practice of administration. Research was oriented more to describing administrative practices and to analyzing problems than to developing theoretical knowledge that would have wider application than to the specific problems under investigation.

The developments of the 1950s were a reaction against what was perceived to be an overly narrow conception of the study of educational administration and an inadequately developed knowledge base for administrative practice. Although various descriptive labels have been attached to these ideas, such as the theory movement or the social science movement, they might best be viewed as a series of initiatives that were mutually supportive but not tightly integrated. Among these ideas were that educational administration includes aspects common to the study and practice of administration in different institutional areas, that the conceptual basis of the field of study was in need of further development, that the social sciences were a potential source of relevant concepts and that the theoretical base of empirical research should be strengthened.

Administration qua Administration

The conceptual basis of educational administration has been influenced over an extended period of time by the study of administration in other institutional areas. Perspectives developed in other contexts such as classical management theory, ideas about scientific management, human relations theory and contingency schools of thought have had a significant impact on theorizing about the administration of education. What was different about the administration *qua* administration concept was the increased emphasis on intentionally and systematically developing a conceptual base that would be common to administration in various arenas. Any unique characteristics of educational administration would, in terms of this concept, be accommodated within extensions of or variations in this common base of knowledge.

Endorsement of the significance of common elements in the study and practice of administration served to legitimate a number of developments, in particular the reliance on concepts that had their origins in theorizing about administration in both industrial and human service organizations. Results of research in these other arenas were assumed to be relevant for educational administration unless there was strong evidence to the contrary. Textbooks written for courses in business administration and public administration were and, to some degree still are, included in the reading lists of courses in educational administration. The idea that the study of educational administration has much in common with administration in other areas has had a pervasive influence on the definition of the field generally and on research specifically.

Social Science Content

The search for relevant concepts outside of the field of study was not limited to administrative areas but was extended to various disciplines, in particular to the social sciences. In retrospect, this does not seem to have been as novel an approach as may have appeared at the time. The relationship of studies in a number of specific areas of educational administration to a social science discipline is inevitably close -- educational finance to economics, control of education to politics, supervision to psychology and sociology -- are a few clear examples. What was advocated, however, was a greatly increased reliance on the social sciences both in the content of preparation programs and in the conduct of research.

With respect to the preparation of administrators, the concept of interdisciplinary or multidisciplinary programs had high currency. The manner in which the concept was operationalized varied; however, the common element in these approaches was that students of educational administration came into direct contact with social scientists either through taking courses in the disciplines or in having professors from these areas participate in interdisciplinary seminars. The general expected outcome was an enhanced ability on the part of educational administrators to bring a variety of perspectives to bear on the analysis of administrative and educational problems.

The social science perspective was intended also to provide the conceptual basis for research. Considerable importance was attached to placing problems of interest to educational administrators within a conceptual framework drawn from the social sciences. For research conducted by professors, collaboration with colleagues who held appointments in social science departments was probably considered to be an ideal. For doctoral candidates, social science professors were usually included in supervisory committees and tended to have considerable influence on determining the definition of research problems and the design of studies. In the 1950s and 1960s, those students of administration who aspired to university appointments often found an advantage in being able to identify a strong background in one of the social science disciplines.

Although the enthusiasm about bringing students of administration into direct contact with the social sciences and with social scientists subsequently waned, the orientation persists and pervades the literature on educational administration. Basic social science concepts have become part of the conceptual base of various areas of specialized study within the field. A review of the literature on almost any topic is likely to include studies that were completed in one or more of the social science disciplines.

Theory Development

The identification of developments in the 1950s as the theory movement draws attention to one particular facet, namely, the proposal to ground research and practice in a firm conceptual or theoretical base. Interpretations of what was actually involved in the theory movement varied from the extreme of developing a theory of administration to developing appropriate theoretical bases for research. The potential origins of the theory or theorizing resided both in other fields of study and in the examination of administrative practices. Consideration of this proposal involved scholars in the full range of possible debates about theory including the definition of theory, the different forms or types of theory, the prospects of developing theory at various levels and the relationship of theory to practice. In spite of all the attention given to theory development, there were few attempts to develop conceptual frameworks that could encompass a relatively broad range of phenomena of interest to students of educational administration. To a much greater extent, researchers applied various specific theories to educational settings and problems.

Enhancing Empirical Research

A concomitant of the other initiatives was an orientation toward conducting empirical research modelled on the methods and strategies current in other fields of study. An emphasis was placed on shifting away from normative orientations to describing what administrators did and to analyzing how organizational processes were interrelated. In general, the intent was to obtain descriptions and explanations of the phenomena that were of interest to educational administrators. An empirical orientation was viewed as supporting the development of theory; within a particular philosophical orientation, the two thrusts were regarded as necessarily complementary.

One way in which this empirical orientation was manifested was through the adoption and adaptation of research instruments that had been developed in other fields. There was widespread use of scales and questionnaires such as value scales, personality inventories and a variety of attitudinal measures. Studies such as those of structural characteristics of schools and other organizations, of professional role orientations of teachers, and of value differences were influenced by this empirical and heavily quantitative orientation. When instruments were not available, researchers developed new ones to obtain measures that could be subjected to statistical analysis.

The general context in which doctoral research in the Department was initiated reflected most aspects of the major developments in the field of study. In general, these developments supported what could be described as a positivistic, functionalist, behaviorist and quantitative orientation to research. The orientation was reinforced by the major emphases in other areas of research in education. Some influences from these other areas within the field of education were fairly direct, such as common research courses usually offered by instructors with an educational psychology background.

Subsequent Developments

In spite of the force of these ideas, there were those who cautioned about attending to the conceptual at the expense of the practical and the technical, about overemphasizing the descriptive and not placing enough attention on the normative dimensions of educational administration, and on taking the study of educational administration too far away from the study of education. At the time, however, these voices tended to be viewed as conservative and reactionary. Although not all centers for the study of administration became oriented to the new concepts, there was a general movement in this direction especially among those that were viewed as leaders in the study of educational administration.

As is to be anticipated in the case of any "movements," enthusiasm and confidence began to wane after the initial efforts proved more challenging than was anticipated and there was limited evidence of progress in the desired direction. Although there were critics of the developments even in the 1950s, a serious questioning of the appropriateness of the general orientation did not occur until the mid-1970s. The critiques took various forms and resulted in some intense discussions about the study of educational administration. The challenge concerned the appropriateness of a behavioristic interpretation of human action, of a functionalist and systems view of organizations, of a claim to value neutrality, and of research conducted within a positivistic and quantitative framework. In general, the proposed alternatives advocated departures from the mode of thought that had come to dominate research in educational administration. These developments began to have an impact on the context of doctoral research in the latter part of the 1970s.

Researcher and Program Characteristics

Another significant factor in understanding the nature of doctoral research relates to the researchers themselves. The most significant characteristic of students who have pursued doctoral studies at the University of Alberta is the diversity in their professional backgrounds and in their career aspirations. Although all students have in common an interest in the administration of education, the precise nature of education and the institutional settings are highly varied. In broad perspective, the *education* encompasses elementary and secondary schools, private schools, technical institutes, colleges, universities and schools of nursing as well as educational or administrative activities in various public and private organizations. Within each of these arenas, the backgrounds and career aspirations of doctoral candidates may relate to any one of a number of positions ranging from first level to the most senior positions in the organizational structure. Additional variety is added in that the students are from different cultural contexts both within Canada and internationally. Further, for more than three decades the same basic program framework served both those who sought to prepare themselves to be researchers or professors of educational administration and those who were preparing for positions as practicing administrators. In general, the policies of the Department accepted implicitly that there was a large measure of similarity in administrative studies within a broad definition of *educational* as well as across a range of institutional arenas.

The research backgrounds of students have also varied to some extent, but nearly all have completed formal courses in research methods at least to the master's level, and most have research experience equivalent to that of a master's thesis or project. Initially, there was reliance on courses in research methods offered by other departments; however, in recent years a research seminar designed to familiarize students with emerging issues and trends as well as to assist in the development of a research proposal has been offered within the Department.

For most of the period reviewed, the program pursued by doctoral students included a total of fourteen three-credit courses consisting of required courses within the Department and optional courses to support the area of specialization taken either within or outside of the Department. The courses reflect to varying degrees the social science orientation that has characterized the study of educational administration for more than three decades. However, direct involvement in courses in social science disciplines was more evident in the earlier years than in more recent years.

Identification and development of a research proposal is generally viewed as the responsibility of the candidate but is done under the guidance of an advisor who chairs the three-member supervisory committee that oversees the research. The proposal is formally approved prior to or in conjunction with an oral candidacy examination. Final approval of the thesis occurs upon successful completion of an oral examination which includes the involvement of an external examiner who was normally present at the examination during the period covered in this review. As a result of recent policy changes, external examiners now serve as readers of theses rather than as participants in the final oral examination.

Organization of the Report

Results of the review of the doctoral theses are reported in eight subsequent chapters, seven of which relate to the elaboration of substantive areas. In the next chapter are presented the results of analyzing the research methodologies used in the 330 studies. The results relate both to the general characteristics of the research and to trends over time. The chapters that are based on the outcomes of the studies are defined in terms of various areas of research and substantive themes. Within each theme, the results are presented in a sequence that generally follows the chronological order in which the research was conducted. The sequence of research areas is as follows: Chapter 3 -- Administrators and Administration; Chapter 4 -- Context of Educational Administration; Chapter 5 -- Organizational Analysis; Chapter 6 -- Individual and Organization; Chapter 7 -- Educational and Organizational Change; Chapter 8 -- Decision Making; and, Chapter 9 -- Policy Development and Implementation. The report concludes with a summary and discussion of the major outcomes of the review.

2

Characteristics of the Research

The methodologies used in doctoral studies as well as the substantive themes in the research are characterized by diversity. Multiple categories are required in order to describe adequately the nature of the research. The basis of the classification scheme selected for this analysis revolves around the purposes of the researcher, the general research strategy and the essential features of approaches to the collection and analysis of data. In the sections of this chapter, a description of the theses in terms of each of these characteristics is followed by an examination of trends during the 1958 to 1991 time period. Although terminology adopted for these descriptions was intended to be consistent with that in general use, some slight departures were necessary in order to reflect accurately the distinctive aspects of the research. The chapter concludes with the identification of major substantive themes in the research conducted by doctoral candidates.

Types of Studies Based on Purpose

Research projects differ in terms of general goals; consequently, one basis on which studies may be classified relates to the purposes of the researcher. A preliminary examination of the theses under review suggested that six purposes would provide an adequate basis for a classification. The terms selected for the typology -- descriptive, relational, evaluative, developmental, conceptual and methodological -- reflect the major possibilities in the intended outcomes of a particular research project. While most theses could be described accurately by single terms, combinations of terms such as descriptive/relational were required in order to categorize studies with multiple objectives. The placement of theses into specific categories was complicated in some instances by lack of clarity about the intent of the study. Consequently, the substance of the entire thesis and not just the statement of purpose was assessed in determining the category into which a particular study might accurately be placed.

Descriptive Studies

As the term indicates, in a descriptive study the intent of the researcher is to describe a particular event, practice, process, group, organization or other phenomenon. Some studies that were placed in the descriptive category might more appropriately have been labelled descriptive/analytical because researchers tended to go beyond description to probe for similarities or differences, to identify trends and to offer possible explanations for findings.

The category of descriptive studies covers a broad range of research into a variety of specific topics; description takes various forms. In general, the studies tend to reflect an inductive orientation. The theoretical or conceptual framework serves primarily to frame the problem under investigation as well as to provide a basis for collecting and analyzing the data. Many of the theses in the descriptive category were justified in terms of contributing to knowledge by providing a description of practice as a point of departure for identifying alternatives for improving practice. Implications for theory development were largely implicit or stated only in general terms. For example, some researchers who completed descriptive studies commented on the usefulness of the conceptual framework or made suggestions for revising the framework for similar studies.

Variety in both areas of interest and in more specific objectives for doing descriptive research is indicated by some illustrative themes and examples. Descriptive research has been conducted:

- to determine the extent to which certain developments or changes in education have taken place, the specific nature of the changes as well as their possible causes and consequences. Among the research that falls into this category are studies such as those on the extent of the regionalization of educational administration in various provinces (R. J. Chapman, 1974), on the characteristics of community schools (K. C. Sullivan, 1976), or on decentralized school budgeting (Caldwell, 1977).

- to trace historically a particular development such as the provisions for financing education (Warren, 1962), evolution of the formal structure of separate schools (Fenske, 1968), development of native education (Daniels, 1973), or efforts to coordinate higher education in a particular region (C. R. Clarke, 1975).

- to describe the process of how a decision was made or how a policy was developed and implemented. Among specific research in this area is Housego's (1964) study of a teacher training issue, Tymko's (1979) analysis of the policy on high school accreditation, and the examination of curriculum implementation by B. L. Bosetti (1990).

- to describe and analyze practices that are not well understood, for example, consultation among teachers (Haughey, 1976), planning processes (Keoyote, 1973), control over decisions (March, 1981), behavior of administrators (Duignan, 1979), leadership (Thorpe, 1989), or the selection of superintendents (Van der Linde, 1989).

- to determine attitudes towards or beliefs about various aspects of the operation of educational systems such as evaluation (Tenove, 1982), financial constraint (Ell, 1988), or inservice education (Pansegrau, 1983).

- to develop guidelines for practice based upon a consolidation and interpretation of data from various sources. A specific illustration would be legal studies involving an examination of statutory law and court cases to identify basic principles that have implications for administrative practice (Bargen, 1959; Cooze, 1989; Enns, 1961; A. K. Harrison, 1980).

- to describe particular organizations (McDowell, 1965; Valentine, 1988) or organizational processes such as change (Alpern, 1986; Elliott, 1985), participation in governance (Kelly, 1973), interpersonal influence (House, 1966), or aspects of teaching-learning (King, 1979; Mireau, 1980; Smyth, 1979; Wodlinger, 1980).

The subsequent chapters on substantive themes serve to give a more comprehensive indication of the numerous specific areas of interest that have been the focus of descriptive research.

Some descriptive studies were directed more at the future than at the present; the researchers collected data that anticipated possible developments. Among these were a number of Delphi studies (Barrington, 1980; Richardson, 1988; Sellinger, 1984; Steier, 1985; Tunstall, 1988) as well as the exploration of possible directions for policy development (Maynes, 1990).

Included in the category of descriptive research are studies presented from the objective stance of an observer as well as those presented more from the perspectives of the participants in the events under investigation. Studies that attempt to present the perspective of the participant could be classed as descriptive/interpretive research. The methodology of such studies tends to reflect qualitative methods associated with grounded theory research strategies even though theory development may not be an explicit objective. Among studies that have a strong interpretive orientation are those by Tardif (1984) of teacher education students, by D. E. Chapman (1986) of mature-age university students and by Moylan (1988) of a female administrator. In each of these studies, the researcher attempted to explore the nature of subjective experience to a degree not characteristic of the vast majority of theses placed in the descriptive category.

Descriptive studies are based primarily on either quantitative or qualitative research strategies. In the former instance, the description is presented in terms of descriptive statistics derived from the analysis of questionnaire data or published records. Most descriptive studies tend to place emphasis on the use of documentary and interview data; consequently, qualitative methods of analysis predominate, though sometimes this is in conjunction with quantitative data and methods. Studies that can be classed as primarily descriptive in nature are seldom exclusively quantitative. When description is an objective of studies involving quantitative methods, this usually occurs in combination with the objective of exploring relationships.

Relational Studies

The primary purpose of researchers who conduct relational studies is, of course, to determine the nature of the relationships between or among certain variables. A conceptual basis for a relational study may be derived from relevant lines of theorizing either in the social sciences generally or in administrative and organizational studies specifically. In general, the researchers whose theses fell into this category attempted to establish the plausibility of the relationship to be tested; however, many researchers tended to be cautious and described their studies as "exploratory" in nature. While some stated hypotheses explicitly, others left them implicit; questions rather than hypotheses were frequently used to guide the data analysis.

Interest in particular relationships appeared to be based on either practical or theoretical considerations or both. As is indicated by the illustrations, relational studies have focused on a diversity of areas including:

- interrelationships among characteristics or behaviors of groups and individuals such as professional role orientation and social interaction (Scharf, 1967), teachers' attitudes and participation in decision making (Masse, 1969), and pupil control ideology and attitudes (MacMillan, 1973).

- interrelationships among characteristics of administrators such as personality variables and innovativeness (Marion, 1966), level of self-actualization and leader behavior (Danyluk, 1981), locus of control orientation and leader behavior (Curtis, 1983), and principals' job satisfaction and perceptions of effectiveness (Gunn, 1984; N. A. Johnson, 1988).

- relationship of organizational variables to individual variables, for example, school climate and teacher behavior (Harvey, 1965), values and organizational climate (Lupini, 1965), bureaucratization and local-cosmopolitan role orientation (Eddy, 1968), and teacher attitudes and school innovativeness (Wiens, 1967).

- relationship of structural characteristics to some measures or indicators of effectiveness (Hassen, 1976; Rourke, 1983), or to personnel utilization (Blowers, 1972; C. C. Uhlman, 1972).

- relationships involving environmental variables such as demographic factors and school attendance (Drolet, 1961), population density and transportation costs (Skuba, 1965), and geography and university participation (Wagner, 1981).

Although the studies identified above are primarily relational, some also have description as an implicit purpose. Studies that have description as an explicit purpose in addition to that of exploring relationships were placed into the descriptive/relational category.

Relational studies involve quantitative research strategies: the collection of data through the use of instruments or records, the derivation of appropriate measures or indicators, and the application of statistical tests such as correlation and regression analysis. Sometimes there may also be an examination of differences between groups using techniques such as chi-square, t-tests and analysis of variance. On the basis of the results of the statistical analysis, the researcher draws conclusions about the relationship that was explored.

The outcomes of relational studies tend to provide support for or to question the usefulness or validity of various lines of theorizing. Usually researchers also attempt to derive some implications for practice from the outcomes of the study.

Descriptive/Relational Studies

A significant proportion of the doctoral thesis research reviewed may best be described as descriptive/relational in that the researchers attempted to achieve two purposes: to present descriptive data on an area of interest and to examine relationships among selected variables. Unlike the studies in the descriptive category, which involve primarily qualitative strategies, the descriptions in descriptive/relational studies are presented primarily in quantitative terms. Consequently, the basic research strategy is similar to that of relational studies. There also are similarities in terms of conceptual bases and in how the conceptualizations are applied.

Researchers who completed descriptive/relational studies defined the purpose in a variety of ways. Some did include "to describe" as an explicit part of the problem statement. However, others used a more general term such as "to analyze," "to examine," "to explore," "to investigate," "to identify," or "to compare." In these cases, the description was made explicit as one of the subproblems or was left implicit allowing description to emerge as an important part of the report on the results of data analysis. The other aspects of the "investigation" or "analysis" in some instances involved examining relationships among variables or differences among categories of respondents.

As is true of both descriptive and relational studies, descriptive/relational research problems have addressed various specific topics. Among these has been research conducted:

- to analyze measurable personality patterns among educators (Von Fange, 1961), structure and performance of school organizations (Hersom, 1969), and potential for conflict between treatment and security staff in correctional institutions (Alward, 1982).

- to examine the nature of member involvement in a teachers' organization (Ingram, 1965), authoritarian orientations of principals and teachers (Anderson, 1968), patterns of organizational structure in school systems (Richert, 1968), and burnout as a stress response among principals (MacPherson, 1985).

- to investigate relationships between professional role orientations and bureaucratic characteristics (Robinson, 1966), participation by community groups in school board decision making (St. James, 1966), job satisfaction of school principals (Rice, 1978), attitudes toward school placement of exceptional children (Barron, 1979), and the distribution of decision making authority in schools (Chung, 1988).

- to identify and describe the nature of prestige hierarchies within the teaching profession (Bride, 1973), and variables associated with student success and transfer from college to university (Vaala, 1988).

Other illustrations would be similar to those identified in the discussion of relational studies.

The category implies that both descriptive and inferential statistics are likely to be evident in the data analysis procedures. Studies that were placed in this category illustrate the application of a broad range of non-parametric and parametric statistical techniques. The procedures used in any one study reflect the particular nature of the research problem and the methods of data collection.

Evaluative Studies

Evaluative studies revolve around assessing in some way the merits of a particular program or practice. The purpose or intent of the researcher is to examine and to make judgements about consequences, outcomes or effects. Among the theses reviewed, some evaluations were directed specifically at innovations or new programs while others focused on continuing practices.

The conceptual bases of evaluative studies may reside only partially in a particular theory of evaluation and may draw on other areas as well. Doherty (1981) and Dickie (1983) both based their evaluative studies on a particular evaluation model. Others, such as Fraser (1974) and Bethel (1981), based their research on the more general evaluation literature as well as that on organizational effectiveness. Still others, such as Aidoo-Taylor (1986), developed a model for assessing the practice under investigation. Some evaluative studies assessed the consequences of policies or programs, for example, educational finance (Deiseach, 1974; Jefferson, 1982) in terms of criteria that were specific to the particular area. Both qualitative and quantitative research strategies were used in evaluative studies, depending upon the particular focus of the research.

Some evaluative studies have a sufficiently strong descriptive component to warrant the designation of descriptive/evaluative studies. They have no distinctive characteristics other than this particular set of dual objectives.

Developmental Studies

In a general way, developmental projects have the characteristics of what is usually referred to as research and development in education. Developmental projects are oriented primarily toward designing a "product" -- a procedure, a program or a policy -- assumed to be of direct interest to the practice of administration. Some testing or evaluation of the "product" may also be involved.

An indication of the range of possibilities is indicated by the nature of the studies that fell into this category:

- a computer-based model of supply of and demand for teachers (Richards, 1971);
- a program information system for a college (Murphy, 1976), a model for monitoring an educational system (Collett, 1981), and a computer support system for an instructional department (T. C. Montgomerie, 1981);
- a program in moral reasoning for use in administrator preparation (Sinclair, 1978); and,
- policy recommendations for the professional preparation of educational administrators (Duncan, 1986).

The conceptual basis of such research usually is drawn from the relevant literature. In designing the "product," the researcher moves from the conceptual to the applied stage. Various research strategies are used in testing or evaluating the product.

Conceptual Studies

All research has a conceptual base, and some conceptual implications usually can be derived from the results of any particular study. In this regard, all doctoral theses are "conceptual" in some respects. However, certain studies are designed primarily for the purpose of contributing to conceptual development or clarification, and the category of conceptual studies is restricted to those specifically dedicated to achieving this purpose. In a conceptual study, the intent of the researcher is to test or analyze critically an existing theory, or to develop a new conceptualization, construct or theory. Conceptual studies may bear some resemblance to developmental studies; however, in the former, the "product" is related to theorizing while in the latter the focus is on some aspect of administrative practice.

The general nature of conceptual studies is illustrated by the following examples:

- testing the applicability or validity of a particular theory or model such as the bureaucratic model (Allison, 1980; MacKay, 1964), Fiedler's theory of leadership (Lavery, 1973; McNamara, 1968), the path-goal theory of leadership (Creed, 1978), the Vroom-Yetton model of decision making (Louden, 1980), or selected models of change (F. Peters, 1986);
- clarifying concepts of faculty vitality (Nicolson, 1988) or of different approaches to planning (Moore, 1973);
- generating hypotheses or theories related to areas such as the developmental stages of teachers' growth during their careers (L. T. Williams, 1986), of the process of educational innovation (Prebble, 1975), or the parameters of organizational decline (Sanders, 1983); and,
- developing an alternative conceptual model such as of organization (Deblois, 1976), of integrated special education (Gelinas, 1978), of authority relations (D. H. Allan, 1978), or of the policy making process (Kunjbehari, 1981).

Studies that had a conceptual purpose were usually designed in combination with other objectives such as describing certain phenomena, exploring relationships or developing methodologies. Consequently, the number of studies that fell specifically into the conceptual category was limited.

Conceptual studies involve methodologies that are appropriate for the specific problem. Studies that involve the testing of a particular theory or model tend to be quantitative in nature. However, those that are directed at developing a model tend to rely on qualitative approaches associated with establishing grounded theory or are based on analysis of documentary materials.

Methodological Studies

In a methodological study, the intent of the researcher is primarily to test the applicability of a research procedure or to develop a new research technique. The emphasis on application to research rather than to administrative practice distinguishes methodological studies from developmental studies. Similar to the situation relating to conceptual studies, but to a lesser degree, placing theses in this category was complicated by the extent to which some researchers adopted innovative research procedures. Although various theses may make a contribution to the development of research methods, only those that had a fairly explicit methodological objective were placed in this category.

Methodological studies have been directed specifically towards developing instruments, testing research procedures or developing new procedures. The specific objectives of methodological studies have taken forms such as:

- to construct measures of the organizational structure and operation of secondary schools (Kelsey, 1973) or to develop an instrument to describe dimensions of the teaching-learning process (Stryde, 1973).

- to test the applicability of the techniques developed by Bellack for the analysis of verbal interaction at school board meetings (Holdaway, 1968).

- to develop a set of price indexes that could be used to analyze educational expenditure (Atherton, 1968), a simulation for research on decision making (Riffel, 1969), a procedure for examining structural changes in organizations over time (Heron, 1972), or a classification system and a method of analyzing the content of communications (Adams, 1973).

Most studies that placed a significant emphasis on the methodological purpose also gave some attention to the conceptual aspect. Consequently, few studies were strictly methodological; the designation of conceptual/methodological is more descriptive of research that has a strong methodological component. A number of the methodological studies also involved the testing of relationships.

The strategies associated with methodological studies tend to be unique to the particular area of interest. In the theses reviewed, the emphasis was mainly on quantitative methods.

Trends in Types of Studies

The distributions by percentages of the 330 theses for each type of research across three time periods -- 1958 to 1971, 1972 to 1981, and 1982 to 1991 -- are shown in Table 1. About 46 percent of all theses completed between 1958 and 1991 were primarily descriptive in nature, 15 percent were relational and 22 percent were descriptive/relational. The other types -- evaluative, developmental, conceptual and methodological -- both singly and in combination comprised only about 16 percent of all theses. Only 6 percent of theses had an evaluative component, and only about 8 percent had either a conceptual or methodological focus. Only about 2 percent were classified as being developmental. Although varied intents are evident in the research pursued by doctoral candidates, the main purposes are to describe and to study relationships. The dominance of these purposes could warrant the label of research "traditions."

Table 1
Percentage Distribution of Theses by Type Based on Purpose

Type of Study	1958-1971 N=85	1972-1981 N=117	1982-1991 N=128	Total N=330
Descriptive	31.8%	41.0%	60.9%	46.4%
Relational	28.2	15.4	6.3	15.2
Descriptive/Relational	30.6	18.8	20.3	22.4
Evaluative	0	6.8	3.9	3.9
Descriptive/Evaluative	1.2	1.7	3.1	2.1
Developmental	1.2	3.4	0.8	1.8
Conceptual	0	2.6	0.8	1.2
Conceptual/Descriptive	0	3.4	3.9	2.7
Conceptual/Descriptive/Methodological	0	2.6	0	0.9
Conceptual/Methodological/Relational	1.2	1.7	0	0.9
Conceptual/Relational	2.4	2.6	0	1.5
Methodological/Relational	3.5	0	0	0.9

An examination of the percentages across the three "decades" reveals some changes in types over time. The percentage of descriptive studies increased from about 32 percent in the first decade to 60 percent in the third while relational studies declined from 28 percent to about 6 percent. The proportion of descriptive/relational studies decreased substantially from the first to the second decade and then remained relatively steady. The shift in types appears to be from a decreasing emphasis on relational studies to an increasing emphasis on descriptive studies. Evaluative studies emerged primarily in the second decade but declined in the third. No patterns are evident in the other types of studies because of the low proportions.

The purposes indicated in the typology do not exhaust all of the possibilities; for example, studies designed to integrate or synthesize knowledge on a particular subject would seem to merit a distinct category. Such a category was not required in order to classify the studies that were reviewed. However, the purposes or intents identified need not be viewed as limiting by future researchers; indeed, they may serve to suggest purposes that are not adequately reflected in the current definition of purposes for conducting doctoral research in educational administration.

Research Strategy

A second basis for classifying theses relates to the general strategy that characterizes the research project. Research strategies are usually referred to as methods in textbooks on research or they may be described as designs; however, the latter term is usually applied to various approaches to experimental research. Seven major research strategies proved to provide a comprehensive basis for categorizing the thesis research: survey, case, case/survey, comparative, causal-comparative, experimental and panel. Only ten of the 330 theses could not be placed into one of these categories necessitating an "other" category.

Although the definitions of terms used to identify the strategies are consistent with those generally in use, some elaboration may serve to clarify the specific nature of the research strategies involved.

Surveys

Researchers who use a survey strategy collect data from a sample in order to draw conclusions about the population from which the sample was selected. The conclusions tend to relate to descriptive features of the population or to relationships among variables. For example, doctoral candidates have conducted survey research to determine the extent to which respondents held particular attitudes as well as the relationship of those attitudes to other characteristics. Data were collected from the members of the sample through procedures such as questionnaires and interviews or were obtained from existing records.

Studies involving essentially a survey strategy encompassed a broad range of sampling methods or combinations of methods. Variety in methods rather than a convergence toward a limited number of methods was the general characteristic of survey strategies in the thesis research. The variety includes both well-established procedures such as random sampling and methods reflecting the unique aspects of particular studies.

Random sampling was used in surveys that related to relatively large as well as to smaller populations. Some studies involved a random sample of teachers in a province (Bride, 1973; Hrynyk, 1966; Ingram, 1965; Masse, 1969); others were somewhat more limited as a random sample of all principals in a province (Rice, 1978), or still more limited such as a sample of academic staff in one university (Prachongchit, 1984). Stratified sampling was used to select samples of administrators (MacPherson, 1985), samples of regional offices of education (Anantrasirichai, 1988), and samples of teachers and administrators (Ikonne, 1985).

All members of a population were the focus of a some surveys as was the case in Newberry's (1971) study of postsecondary institutions or Blowers' (1971) study of operating school systems in particular provinces. Other surveys involved all school superintendents in four provinces (March, 1981), all principals of senior high schools in Alberta (Gunn, 1984), and all directors of education in Saskatchewan (Van der Linde, 1989). When not all members of the population responded or participated, those who did were considered to be a sample of the population. For example, the sample for Alward's (1982) study were those who responded in the three institutions comprising the total population.

Cluster sampling has been used as a manageable and defensible strategy for collecting data on variables of interest to doctoral researchers in educational administration. In a cluster approach, the initial selection is of an organization or organizational unit followed by selection of individuals. Sometimes there may be sequential cluster sampling; for example, Greenfield (1963) selected a sample of twenty-two districts, two schools in each district and two classrooms in each school and then collected data on the students in those classrooms. Similarly, teachers in sixteen schools in four school districts were the focus of R. C. Harrison's (1978) study. Grainger (1984) studied twenty professional educators and twenty-four parents in four schools while Haughey (1976) collected data from teachers in three schools.

Purposive sampling has also been used. For example, Larsen (1984) selected a sample of ten nurses in a specified age-range who held earned doctoral degrees, C. C. Uhlman(1972) selected twenty-four districts in British Columbia, and

Rourke (1983) selected the twenty-one largest elementary schools in a particular district. Among other approaches to sampling that were used by researchers are quota sampling (Anderson, 1968), reputational sampling (Prout, 1977; Rainsforth, 1987), volunteers (Campbell, 1982), and snowball sampling (Bottas, 1988).

Although populations were usually defined in terms of an explicit or implicit geographical area, some surveys tended to be restricted to a particular school district or to a particular organization. For example, both M. Williams (1981) and Sarros (1986) conducted surveys in one school district involving fairly large samples. Similarly, Ratsoy's (1965) study of teacher education students involved nearly two thousand respondents in one faculty of education. In contrast to the preceding illustrations, some surveys involved a relatively small number of respondents.

Included as survey research in this classification are studies in which the data sources were not individuals but records or documents. In order to establish what the practices are in a particular area, documents that contain a record of those practices may have to be reviewed as in the case of legal studies (Bargen, 1959; Enns, 1961), analyses of collective agreements (B. K. Johnson, 1971) or analyses of minutes of meetings (Renihan, 1977). Because the data and methods of analysis are distinctive, these surveys differ from the majority but warrant classification as such because of the more general characteristics of the strategy.

Case Studies

Research projects that involved the in-depth examination of one particular individual, group of individuals, organization, event or series of events were categorized as case studies. The case study strategy is used when a researcher wishes to gain a more comprehensive understanding of certain phenomena than is likely to result from a survey. Because the case study strategy is frequently used to achieve the purpose of description, some of the characteristics of case studies are reflected in the discussion of descriptive research in the preceding section; consequently, this section focuses on other features of the strategy.

Case studies in doctoral research varied in terms of the extent to which a historical perspective entered into the analysis. Some case studies were essentially descriptions of a particular event or phenomenon at one point in time. Although there is inevitably a historical dimension to such studies, this was not a significant part of either the research problem or the methodology. Studies of this type have focused on the dynamics of interpersonal influence in a school (House, 1966), the operation of an urban school board (S. W. Martin, 1968), the adoption of a participative governance approach (Cornish, 1977; Kelly, 1973), the process of collective negotiations (McLeod, 1976), the operation of a particular organizational unit (Okello, 1979), teaching-learning actions and behaviors (Mireau, 1980; Smyth, 1979), the operation of community schools (Quarshie (1989) and socialization processes (McGuire, 1988).

In other case studies, the historical dimension entered to the extent that there was some effort to describe developments over a period of time. Most of the descriptive studies that attempted to trace how a decision was made, or how a certain policy was developed or implemented, are historical in the sense that some efforts were usually made to describe the antecedents of the events that were of particular interest as well as to trace the evolution of the development. In some instances the time dimension was explicit in the conceptualization of the problem. For example, Korteweg (1972) focused on a "decade of social studies curriculum development in Alberta," Kozakewich (1980) linked policy developments to activities of interest groups in two previous decades, Taylor (1980) referred to the "evolution of a policy making system" and Iles (1984) examined the history of school jurisdictional issues in a particular area to identify conflictual themes. In some respects, the retrospective analysis brought into play the application of aspects of historical research strategies.

The third type of case study had a more explicit historical focus in that the researcher sought to describe and search for explanations of what occurred and how this came about. For example, Toombs (1966) analyzed parliamentary debate on federal financial participation for the period 1867-1960, and Hodgson (1964) examined the nature and purposes of public schools in the Northwest Territories and Alberta from 1885 to 1963. H. J. Uhlman (1959) studied the impact of demographic and economic changes on financing education, Scott (1973) focused on the development of secondary education in Jamaica over a ten-year period while Hezekiah traced the development of nursing education in Trinidad and Tobago over a thirty-year period, and V. J. Martin (1988) examined the impact of external aid on the development of education in Papua New Guineau from 1975 to 1985. Other studies presented a broader historical perspective such as Hollaar's (1989) research on Calvinistic/Reformed Christian schools. Still other researchers focused on a particular historical development as did Alexander (1985) in examining the philosophy of adult education in the Antigonish movement.

In pursuing research topics that lent themselves to a case study strategy, some researchers chose to include more than one instance or case in the investigation. These are, in effect, multi-site or multi-case studies. For example, Thorpe (1989) included seven administrators in a study of leadership while B. Young (1989) developed a biographical study around the life experiences of four women educators. The analysis in such studies was presented either on a case by case basis or developed around themes that cut across cases. Regardless of the specific approach to presenting the results, the researcher usually attempted to develop some conclusions or working hypotheses based on all of the cases in the study.

Case/Surveys

Some studies had certain characteristics of a case study in that the focus was on one organization; however, data collection procedures resembled those of a survey. Consequently, there was need for a case/survey category to describe this type of research strategy. Some examples may serve to clarify the approach.

Eastcott (1975) used a case/survey approach to examine the perceptions and preferences for participation in decision making of the members of a university faculty. Since only one particular organizational unit was involved, the study might have been developed along the lines of a case study. However, the researcher was guided by research questions and used data collection techniques frequently associated with surveys. A similar approach was used by D. G. Young (1979) to study the effectiveness of temporary adaptive systems. Rose (1981) studied the evolution of the role of the board of trustees in a Bible college that involved, among other data collection methods, a questionnaire survey of more than four hundred respondents. The study by J. H. Jeffrey (1989) of the relationships between the Alberta Teachers' Association and other organizations also exemplifies the combination of case and survey research strategies.

Also included in the case/survey category were studies that incorporated both a survey and case studies as separate phases of the overall design. For example, Caldwell (1977), conducted a province-wide survey on decentralized budgeting and then selected seven school systems for intensive examination. Although various other studies approximated this design, the two distinct stages appeared in only a limited number of theses.

Comparative Studies

Even though comparison was an aspect of data analysis in numerous theses, the category of comparative studies was restricted to those that involved a deliberate strategy of making comparisons between two or more sources of data: individuals, organizations, events or other phenomena. The decision on placing studies into this category was complicated by the variety of ways in which comparisons entered into the design of studies. Some researchers described their studies as comparative when this was more descriptive of the approach to data analysis rather than of the overall strategy. In others, the comparative nature of the design was not dealt with explicitly by the researcher.

Among those researchers who made the comparative nature of the study explicit are Maddocks (1972) in relation to the analysis of approaches to planning development in four postsecondary education systems. Other studies that fell into the comparative category are Sadighian's (1975) examination of university goals and governance in North America and Iran, Glanville's (1986) examination of the relationship between governance structure and policy setting, Mainali's (1985) study of organizational structures in two different cultural contexts and Solon's (1990) analysis of the goals of universities in Papua New Guinea. In other studies such as those of Walkington (1975), Rozycki (1981) and Byrne (1985), the comparative aspects were also evident in the design but not accentuated in the title.

Causal-Comparative Studies

Causal-comparative or ex post facto studies involve the use of "naturally-occurring experiments" in which groups are selected because they differ on some characteristic. An attempt is then made to identify factors that might account for the difference. A number of studies clearly fell into this category.

In a study of the relationships among leader behavior, staff morale and productivity, Keeler (1961) assigned a productivity score to each of 179 schools based on the results of grade nine examinations from which the effects of pupil intelligence test scores had been partialled out. Twenty-three schools that were above the mean on productivity and twenty-three schools below the mean were selected as the sample for examining the relationships that were of interest. A similar strategy was used by Bevan (1970) in selecting two high schools that were rated at the extremes among nine schools on openness of climate in a study of the need for independence in high school students. A third example of a causal-comparative strategy is the study by T. S. Sullivan (1987) of variables related to high school achievement. Samples of forty-eight graduates and forty-two dropouts in one school district were selected and used as the basis for exploring differences between the two groups on students' home environment, personal characteristics, academic performance and school life experiences.

In some studies the characteristics of an ex post facto strategy may appear at the data analysis stage. For example, results of the analysis of data collected through a survey design may be used to establish groups that differ on certain characteristics. Subsequent analysis is then carried out to attempt to explain differences between the groups in terms of other data collected at the same time.

For purposes of this review, such approaches were categorized as survey rather than as causal-comparative strategies.

Experimental Studies

As is generally recognized, the causal-comparative strategy is actually misnamed because causality may be inferred but is not confirmed by such designs; an experimental strategy is required for this purpose. In an experimental study the researcher engages in the intentional and controlled manipulation of variables to test for a cause-effect relationship. A number of the theses reviewed have the characteristics of experimental studies; others are closer approximations of quasi-experimental designs in that the random selection to treatment groups is absent.

In the first experimental study, Brown (1961) examined the differential effect of stress-inducing supervision on student teachers. The student teachers were visited by experimenters performing the role of faculty consultants who observed lessons, verbally induced failure stress and observed changes in effectiveness in a subsequent lesson. Berghofer (1972) used three groups of eleven subjects each to test the effects of different levels of exposure to literature on futures research on the development of educational policy. The subjects were graduate students in educational administration who had been matched on a number of relevant variables. Graduate students were also used by Plaxton (1969) to study the effects of different decision rules on interaction in small groups. Batchler (1977) involved participants in a workshop to study the relationship between organizational climate and administrative behavior. Climate was manipulated in terms of the information given to participants about a school while administrative behavior was measured on in-basket items. Tuckwell (1980) studied the impact of an inservice program on teacher thought processes with two teachers who were part of a larger sample participating in a quasi-experimental study.

Panel Studies

As a general strategy, panel studies are used in longitudinal research to analyze trends. Essentially, panel strategies involve collection of data from the same set of individuals at different points in time. The closest approximation to panel studies in the theses reviewed were Delphi studies. In these studies, participants who are expert or knowledgeable in an area are asked to assess the probability, feasibility or desirability of future trends or developments. Members of the panel then participate in successive rounds of data collection; results from the preceding round are made available to the participants.

The first task of the researcher is to identify prospective panel members on the basis of some criteria. Barrington (1980) used a panel of ten college presidents and seven government officials to assess the projected impact of environmental forces on community colleges. Other researchers (Richardson, 1988; Steier, 1985; Tunstall, 1988) used the same basic strategy to identify appropriate respondents to study policy issues in specific areas. Retaining the participation of panel members in the successive rounds proved to be a major challenge to the researcher in some projects.

Trends in Research Strategies

The distributions of theses presented in Table 2 indicate that two major strategies might merit the designation of traditions: the survey and the case study. Together these strategies accounted for nearly 85 percent of all doctoral research completed between 1958 and 1991. When the case/survey strategies are included, the proportion approaches 89 percent. Although making comparisons was part of the analysis in a number of studies, only about 3 percent placed a major emphasis on a comparative design. Together, experimental and causal-comparative research strategies were used in only about 3 percent of theses while less than 2 percent involved data collection from a panel. The "other" category included simulation, computer modelling, information systems and semiotic analysis.

Table 2
Percentage Distribution of Theses by Research Strategy

Research Strategy	1958-1971 N=85	1972-1981 N=117	1982-1991 N=128	Total N=330
Survey	71.7%	46.2%	50.8%	54.5%
Case	17.6	33.3	35.9	30.3
Case/Survey	2.4	5.1	3.9	3.9
Comparative	0	6.0	3.1	3.3
Experimental	3.5	3.4	0	2.1
Panel	0	0.9	3.9	1.8
Causal-Comparative	2.4	0	0.8	0.9
Other	2.4	5.1	1.6	3.0

Trends over the three "decades" reveal a decline in the proportion of surveys and an increase in the proportion of case studies. Surveys accounted for approximately 71 percent of studies completed in the first decade but for only about 50 percent of those completed in each of the second and third decades. Case studies increased from around 17 percent in the first time period to about 36 percent in the most recent decade.

The data presented in Table 3 indicate the number of case studies that had varying degrees of historical emphasis in each of the three time periods. Of the 100 theses that used primarily a case study research strategy, forty-nine were essentially non-historical, twenty-four gave some attention to a historical perspective and twenty-seven had a substantial historical emphasis.

Table 3
Distribution of Case Studies by Historical Emphasis

Historical Emphasis	1958-1971	1972-1981	1982-1991	Total
Non-historical	2	20	27	49
Part historical	10	5	9	24
Historical	3	14	10	27
Total	15	39	46	100

Case studies that do not have an explicit historical dimension increased proportionately in each of the three decades. Studies that partially have a historical dimension decreased significantly between the first and second decade. In contrast, those that have a strong and explicit historical dimension increased from the first to the second decade and declined slightly in the third decade. Although not totally absent, historical research strategies were used in only a relatively small proportion, less than 10 percent, of the doctoral studies that were reviewed.

Data Collection Methods

Although research methodologies could be described broadly in terms of such categories as quantitative and qualitative, a more precise description can be obtained from a consideration of the major methods of data collection. For the studies completed by doctoral candidates in the Department, data collection was through five main methods that were used singly or in combination: questionnaires, interviews, documents, observations and records.

Questionnaires

The term *questionnaires* is used here to describe both various published or standardized instruments as well as those designed by the researcher. The number of researchers who designed their own questionnaires is considerably greater than those who modified available instruments or used published instruments.

The published instruments that have been used include a range of tests or scales of a primarily attitudinal nature. Among these are the Rokeach Dogmatism Scale (Berghofer, 1972; Mansfield, 1967; O'Reilly, 1967), Edwards Personal Preference Schedule (Brown, 1961; Milne, 1969), Helsel Status Obeisance Scale (MacMillan, 1973), the Rotter Internal-External Scale (Curtis, 1983), Differential Values Inventory (Lupini, 1965; Marion, 1966), Myers-Briggs Type Indicator (Von Fange, 1961), the Omnibus Personality Inventory (Ratsoy, 1965), the California F-Scale (Anderson, 1968), the Kluckhohn value scale (Bryans, 1971; Gue, 1967; Kitchen, 1966), and the Maslach Burnout Inventory (MacPherson, 1985; Sarros, 1986). Researchers have also used instruments more closely associated with studies in administration such as the Leader Behavior Description Questionnaire (Danyluk, 1981; Girard, 1967; Richert, 1968; Tronc, 1969), the Organizational Climate Description Questionnaire (Dyck, 1978; Harvey, 1965; Sackney, 1976), and the measures associated with Fiedler's leadership theory (Lavery, 1973; McKague, 1968; McNamara, 1968). Although some of these instruments have tended to be overused in the field generally, this does not appear to be the case in relation to this particular set of studies.

Instruments that were adapted to the educational setting resulted in the development of a number of lines of research. For example, MacKay's (1964) adaptation of Hall's Organizational Inventory was used later by other researchers such as Robinson (1966), Kolesar (1967), Richert (1968) and Hassen (1976). The adaptation of Corwin's Professional Role Orientation scale developed by Hrynyk (1966) was also used subsequently by a number of researchers (Masse, 1969; Nixon, 1975; Scharf, 1966). Such lines of research have seldom resulted in the systematic and cumulative analysis of the merits of the instruments involved.

Studies involving data collection by questionnaire are primarily quantitative in nature and lead to a variety of methods of data analysis. Some researchers who developed or modified questionnaires (Anantrasirichai, 1988; Mainali, 1985; Simpkins, 1968; M. Williams, 1981) used factor analysis in defining or validating scales. The data analysis for such studies covers a broad range of descriptive and inferential statistics including correlation, regression analysis, t-tests, analysis of variance, and analysis of covariance.

Interviews

Interviews are used in a variety of ways in research: they may range from being the primary source of data to being supplementary to other methods of data collection. Regardless of their general place in the research design, interviews vary in degree of structure from relatively highly structured to unstructured. The full range was evident in the doctoral studies that were reviewed.

Among the more highly structured forms of interviews are those associated with the Aston methodology for developing measures of the structure of organizations. The method was used by Newberry (1971), Heron (1972), Kelsey (1973), Sackney (1976) and Rourke (1983). Other researchers described their interviews as either structured, semi-structured or relatively unstructured. The majority of interviews fell into the semi-structured area in that the researcher usually had an interview guide or schedule but remained flexible, allowing the order of questions to shift. Relatively few researchers described their approach as being highly unstructured.

The approach to the analysis of interview data reflects the degree of structure in data collection. Clearly, the more structured the interview, the more the content analysis involves predetermined coding. As interviews move toward the unstructured end of the continuum, there is greater emphasis on attempting to identify themes in the transcripts.

Observations

Observation as a method of data collection can take a variety of forms. Like interviews, observations include both structured approaches and those in which there is no pre-determined basis for categorizing the observations.

Both direct and indirect forms of observation have been used in structured approaches. As an example of direct observation, Mathews (1967) personally observed school board meetings and used interaction analysis to code the process. Similarly, Hemphill (1968) used the same coding methods but involved two trained coders to collect data on school board meetings. In contrast, Plaxton (1969) videotaped group sessions and then analyzed the interaction. Both direct observation and analysis of videotapes have been used in studies of teaching and learning processes (King, 1979; Mireau, 1980; Smyth, 1979; Tuckwell, 1980; Wodlinger, 1980). Structured methods of analysis were used in some instances.

A number of researchers used structured observation techniques -- coding within predetermined categories -- to analyze the work of administrators (D. J. Allan, 1985; Cooper, 1986; Duignan, 1979; Hannah, 1981). In contrast to this approach, Moylan (1988) used more varied methods as did Bird (1982) and Hall (1989) to study particular individuals.

In using observational strategies, researchers have defined varying participant roles for themselves and have carried out studies in a variety of sites such as in a diagnostic clinic (Falk, 1983), classrooms (MacKinnon, 1987; Tardif, 1984), a clinical nursing unit (Smyk, 1987) and a school of nursing (Valentine, 1988). A number of researchers (B. L. Bosetti, 1990; Maynes, 1990; Okello, 1979; B. W. Pickard, 1975) used observation in the form of attendance at meetings or becoming involved in other activities. Others (E. C. Allan, 1985; Bohac, 1980; N. W. Clarke, 1977; Cornish, 1977; Stringham, 1974) were actual participants in the events that were the focus of their research. In some instances observation was a supplementary rather than a major aspect of data collection.

The method of data analysis varies with the degree of structure involved. As in the case of interviews, the more highly structured the data, the more straightforward is the analysis task. In the less structured forms of observation, researchers usually make field notes that are then analyzed in much the same way as are transcripts of unstructured interviews.

Documents

Documents as data sources include a broad range of written or printed materials that are relevant to a particular subject. Examples of the types of documents that have served as primary and secondary sources are listed below:

- official files, reports, transcripts of proceedings, records of parliamentary debates, minutes, archives;

- legal documents such as laws and by-laws, acts of governments, law reports, statutes, records of court cases;

- correspondence, letters, briefs, memoranda;

- newspaper articles, newsletters, bulletins, periodicals ;

- policy documents, reports, historical documents; and,
- literature on a particular theme, major writings of theorists of interest.

Documentary sources are subjected to an appropriate form of content analysis to extract the data relevant to the research problem.

Records

The term *records* is used in the narrow sense to refer to data sources that are primarily quantitative in nature and that have an official or authoritative character. The following are among the types of records that have been used as data sources:

- student achievement data, student information files, cumulative records;
- statistical records such as earnings of various job classifications, census data and vital statistics;
- annual reports of government departments, operational reports submitted by school districts; and,
- audited financial statements.

Data extracted from records are analyzed by a variety of descriptive techniques or may be used in inferential analysis.

Trends in Application of Methods

The extent to which questionnaires, interviews, observations, documents and records were used in data collection across the 330 theses is indicated by the frequency distributions in Table 4. About 58 percent of the research projects involved data collection by questionnaires followed closely by interviews which were used in nearly 57 percent of the theses and by documents which were data sources in about 39 percent of the studies. Both observations and records were used in relatively small proportions of the theses, about 14 percent and 12 percent respectively.

A comparison of the proportion of research projects that used particular methods indicates changes across the three "decades." The extent to which questionnaires were involved in data collection declined from being used in more than two thirds of theses in the first decade to about one half in the third decade. Although relatively small, the proportion of studies involving use of records also declined. In contrast, the use of interviews increased from about 28 percent to slightly more than 75 percent. Observations also increased dramatically as sources of data, while the use of documents increased from about 28 percent of theses to about 47 percent. In general, the trends indicate a fairly dramatic shift from quantitative to qualitative methods across the three decades.

Table 4
Percentage of Use of Data Collection Methods or Sources

Method or Source	1958-1971 N=85	1972-1981 N=117	1982-1991 N=128	Total N=330
Questionnaires	67.1%	59.8%	50.8%	58.2%
Interviews	28.2	56.4	75.8	56.7
Documents	28.2	39.3	46.9	39.4
Observations	4.7	16.2	19.5	14.5
Records	22.4	9.4	7.0	11.8

Note: Sums of columns exceed 100% because of use of multiple methods.

The extent to which multiple methods of data collection were used is indicated by the data in Table 5. Just over 40 percent of the studies used a single method of data collection while about 38 percent used two methods. Another 19 percent used three methods. Only a small proportion of research projects involved more than three methods of data collection. Over the three "decades," the proportion of studies using only a single method of data collection was halved, from about 62 percent to 29 percent. In contrast the number of studies involving two methods increased from 25 percent to 45 percent. Although fewer studies used three methods, the increase was proportionately the same.

The particular method or combination of methods used by the 330 researchers is indicated in Table 6. Eighty-seven of the 136 studies that used only a single method involved questionnaires while documents and records were the single data source in each of twenty studies. Eight studies used interviews exclusively, and only one used observation exclusively. The decline in the use of questionnaires over the three decades noted previously is also evident in this table.

Table 5
Percentage Distribution of Theses by Number of Methods

Number of Methods	1958- 1971 N=85	1972- 1981 N=117	1982- 1991 N=128	Total N=330
One	62.4%	39.3%	28.9%	41.2%
Two	24.7	41.9	44.5	38.5
Three	12.9	17.1	24.2	18.8
Four	0	1.7	2.3	1.5

The two most frequently occurring combination of methods were documents/ interviews and interviews/questionnaires, each of which comprises about 15 percent of the studies. The next most frequently occurring combinations were documents/interviews/questionnaires and documents/interviews/observations representing about 8 percent and 6 percent of the studies, respectively. Various other combinations occurred but in total represent only about 13 percent of all studies.

Purpose, Strategy and Method

Further insights into the characteristics of research in general and trends over time were obtained by combining the different bases of classification. This was done in two stages: first by focusing on type and research strategy and, second, by adding consideration of the data collection methods. To simplify the presentation, the description is restricted to major categories or types of studies.

When a cross classification of purpose and strategy was developed, four major types were evident: descriptive case studies, descriptive surveys, descriptive/ relational surveys and relational surveys. Two hundred forty of the 330 theses could be placed into one of these four types. As is indicated by the data in Table 7, approximately 26 percent of all theses are descriptive case studies and another 18 percent are descriptive/relational surveys. Descriptive surveys and relational surveys account for 16 percent and 12 percent, respectively, of the studies.

The proportion of descriptive case studies increased across the "decades" from about 17 percent through 23 percent to 33 percent. A similar trend -- about 14 percent to 12 percent and then to 22 percent -- is evident for descriptive surveys.

Table 6
Distribution of Theses by Data Collection Method

Method	1958-1971	1972-1981	1982-1991	Total
Questionnaires	35	29	23	87
Documents	7	9	4	20
Records	11	6	3	20
Interviews	0	1	7	8
Observations	0	1	0	1
Documents/Interviews	7	20	26	53
Interviews/Questionnaires	6	19	25	50
Documents/Interviews/Questionnaires	7	9	11	27
Documents/Interviews/Observations	0	5	15	20
Interviews/Observations	1	4	4	9
Interviews/Questionnaires/Records	2	3	2	7
Questionnaires/Records	4	2	0	6
Observations/Questionnaires	2	3	0	5
Documents/Interviews/Observations/Quest.	0	2	3	5
Interviews/Observations/Questionnaires	0	3	0	3
Interviews/Observations/Records	0	0	3	3
Documents/Observations	0	1	0	1
Documents/Records	1	0	0	1
Interviews/Records	0	0	1	1
Documents/Interviews/Records	1	0	0	1
Documents/Observations/Questionnaires	1	0	0	1
Documents/Questionnaires	0	0	1	1
Total	85	117	128	330

In contrast, descriptive/relational surveys declined from about 28 percent to about 15 percent. Even more dramatic was the decline of relational surveys from 22 percent to just over 5 percent of all studies.

Table 7
Percentage Distribution of Theses by Type Based on Purpose/Strategy

Type	1958-1971 N=85	1972-1981 N=117	1982-1991 N=128	Total N=330
Descriptive Case	17.6%	23.9%	33.6%	26.1%
Descriptive/Relational Survey	28.2	14.5	14.8	18.2
Descriptive Survey	14.1	12.0	21.9	16.4
Relational Survey	22.4	12.0	5.5	12.1
Other	17.6	37.6	24.2	27.3

A further basis of classification involved combining the purpose/strategy type with the methods of data collection. The results are summarized in Table 8 for the 240 theses. Descriptive case studies involved the most varied methods while relational and descriptive/relational surveys had least variation in data collection and analysis methods. Nearly one half of descriptive case studies used interviews and documents in data collection. The next largest cluster, about than one eighth of the theses, relied on interviews/observations. Various other methods singly or in combination -- interviews, documents, documents/interviews/observations, observations/questionnaires, and others -- were also used. Almost two thirds of descriptive relational surveys involved data collection by questionnaires only while about one fifth combined questionnaires and interviews. Relational studies were based primarily on either questionnaires or records as data sources. The two highest ranking methods in descriptive surveys were interviews/questionnaires and documents/records. No particular trends were evident in these types over the three time periods other than the shifts in methods that have already been mentioned.

Research Areas

Since there is no consensus about the boundaries or major subdivisions of the field, any basis for categorizing theses in terms of the substantive focus is likely to be somewhat arbitrary. The most defensible rationale for the task seemed to

Table 8
Distribution of Theses by Type and Method

Method	Type A	B	C	D	Total
Questionnaires	0	39	7	21	67
Interviews/Questionnaires	4	13	16	8	41
Documents/Interviews	39	0	2	0	41
Records	0	4	0	11	15
Doc./Int./Quest./Records	7	0	8	0	15
Interviews	6	0	8	0	14
Interviews/Observations	11	0	0	0	11
Documents/Records	0	0	9	0	9
Documents/Interviews/Obs.	8	0	0	0	8
Documents	6	0	0	0	6
Observations/Questionnaires	5	0	0	0	5
Observations	0	0	4	0	4
Other	0	4	0	0	4
Total	86	60	54	40	240

Note: A = Descriptive Case; B= Descriptive/Relational Survey; C = Descriptive Survey; D = Relational Survey

be one that was consistent with the purposes of the analysis and with the focus of the research. Accordingly, the categories and subcategories for organizing the substantive review emerged as the result of a lengthy process of sorting, classifying and regrouping abstracts of the studies. Among the underlying objectives in the procedure were the desire to present as unified a perspective on the research as possible, to be parsimonious in the themes used, and, at the same time, to reflect adequately the diversity of the research topics. Inevitably, the major research themes identified reflect a particular view of the subdivisions in the study of educational administration.

Through the process that was adopted, seven major research areas were identified: individual and organization, organizational analysis, policy development and implementation, educational and organizational change, the context of educational administration, decision making, and the administrator and administration. As might be anticipated, some arbitrary decisions were necessary in this process. Certain studies could easily be placed in any one of a number of categories, while other topics tested the limits of the framework. To have done justice to the uniqueness of the individual theses would have necessitated a much more complex presentation of the review of the studies.

An indication of the general substantive emphasis in the research is provided by the data in Table 9. The general area that was labelled "individual and organization" encompassed the largest proportion of studies, approximately one fifth. About one sixth of the studies related to each of two areas: organizational analysis, and policy studies. The other substantive areas in order of decreasing emphasis were educational and organizational change, the context of educational administration, decision making and the administrator. The latter category included fewer than one tenth of all studies.

Table 9
Percentage Distribution of Theses by Research Area

Research Area	1958-1971 N=85	1972-1981 N=117	1982-1991 N=128	Total N=330
Individual and Organization	16.5%	16.2%	25.0%	19.7%
Organizational Analysis	17.6	17.9	15.6	17.0
Policy Development and Implementation	5.9	21.4	21.1	17.3
Educational and Organizational Change	8.2	16.2	14.8	13.6
Context of Educational Administration	22.4	10.3	7.8	12.4
Decision Making	17.6	12.0	6.3	11.2
Administrators and Administration	11.8	6.0	9.4	8.8

Some changes in substantive emphasis are evident over the three decades. Most dramatic is the consistent decrease in the proportion of studies that relate to the context of educational administration -- from about 22 percent of the studies in the first decade to about 8 percent in the most recent decade. A similar trend is evident in research related to decision making. The focus on the administrator decreased from the first to the second decade but moved upward in the third decade. Research in the general area of organizational analysis remained steady over the first two decades but declined slightly as a proportion of studies in the third. The remaining three areas -- individual and organization, policy development and implementation, and educational and organizational change -- all show increases as a proportion of studies from the first to the third decade. The most dramatic change was in the area of policy development and implementation which accounted for only about 6 percent of the studies in the first decade but approximately 21 percent in the second and third. Research into change and into the individual and the organization also increased as proportions of total studies across the three decades. The nature of these changes in emphasis will become evident in the more detailed reporting of the research areas in the following chapters.

Summary

Although the characteristics of doctoral research varied along a number of dimensions, there were clusters within particular categories based on purpose, research strategy and method of data collection. Most of the theses were based on research that was essentially descriptive or had a significant descriptive component. About one third of the studies involved the exploration of relationships among variables. Two main research strategies -- the survey and the case study -- were dominant. Surveys accounted for about one half of all studies. Questionnaires, interviews and document analysis were widely used, frequently in combination. Particularly evident in the combined types are (a) relational and descriptive/relational studies based on questionnaire data, and (b) descriptive case studies using interviews and documents as data sources.

A number of shifts in emphasis were evident over the three time periods. The proportion of descriptive studies increased while the proportion of relational studies declined. Similarly, research strategies involving case studies, interviews and observation, and multiple methods of data collection increased while there was a decline in surveys, in the use of questionnaires and records, and in single methods of data collection. When considered in combination, the trends appear to indicate a major shift in the conception of strategies considered appropriate for doctoral research in educational administration.

The research topics pursued by doctoral candidates were highly varied; seven major themes were identified. In terms of this categorization, more than one half of the studies related to some aspect of organizational studies or policy analysis. The other half related to change, the context of educational administration, decision making and the administrator. Some shifts are evident over time, as in the case of research strategies.

3

Administrators and Administration

Although the topics of numerous theses relate to administrators and administrative functions, only twenty-nine focus specifically on this general area. A number of different themes were identified. The first revolves around the roles of administrators and selection processes. Another line of research involves analyzing the nature of administrative work. Administration has also been examined from the perspective of leadership; still other studies relate to various administrator characteristics. A major purpose of research in this area has been to clarify the nature of administrative work and to identify factors that influence role performance.

Roles, Preparation and Selection

Research on roles and selection processes has tended to focus on senior administrative positions such as superintendent of schools or director of education. The initial studies on school superintendents occurred at a time of significant organizational change. In a number of provinces, larger units of administration had been established. Although superintendents were still appointed and employed by the provincial department of education, they were charged with the task of working with a board responsible for the administration of a geographic area that encompassed what had previously been a number of school districts. These changes prompted questions about the role of the school superintendent and about the readiness of the role incumbents to fulfill the required responsibilities.

In the first doctoral study that was completed in the Department, Collins (1958) investigated the extent of role conflict and role consensus for the position of superintendent in larger units of administration in five provinces. A subsequent study by Ready (1961) focused on the extent to which significant tasks associated with the superintendency were recognized and on preparation needs of superintendents in Saskatchewan. Later, Sampson (1965) examined selection criteria, conditions of employment and job satisfaction of provincially-employed superintendents and inspectors across Canada. The general research strategy used in these studies was the survey involving both interview and questionnaire methods of data collection. Concepts such as role conflict were used; however, the studies tended to be grounded in legal and formal interpretations of organizational structures.

Although provincially-appointed superintendents were formally viewed as line officers of the provincial education department and staff officers of the board, Collins (1958) found that the superintendents actually performed line and staff functions for both the board and the department. This duality resulted in a lack of clarity about lines of authority as well as in conflict among roles in the administrative structure. Results of the subsequent study by Ready (1961) confirmed that the role was not fully understood by the incumbents, particularly in the sense that they did not recognize significant tasks in various operational areas as defined by the ideal presented in the literature. More generally, superintendents seemed to be deficient in the conceptual aspects of administration and lacked adequate preparation for instructional leadership tasks.

Some indication of the circumstances that may have contributed to the situation became evident in a later study. Sampson (1965) found that age, experience and academic preparation were the major selection criteria. Extensive teaching and administrative experience was required in most provinces. Many of the superintendents were recruited from rural or small urban areas. Some were working with more than twenty school boards for salaries not much higher, and sometimes lower, than those paid to principals. Although the variety of work was viewed positively, some superintendents expressed concern that they were "spreading themselves too thinly." Education leave and vacation provisions were areas in which dissatisfaction was expressed.

General conclusions that emerged from these studies revolved around the limited preparation, challenging conditions of employment and structural constraints under which superintendents worked. Recommendations addressed these specific concerns and also raised the possibility that local employment of superintendents might remedy the problems. The circumstances of superintendents did change dramatically over the next twenty-five years. However, there were no doctoral studies to document the process of change and the impact of those changes on the position.

By the time of the next studies, superintendents were employed by school boards and generally were responsible for relating to only one board. Some of the specific sources of role problems had been eliminated, and working conditions had improved. Nevertheless, there was still interest in how superintendents performed the role and in how they were selected. Green (1988) surveyed Alberta superintendents in order to analyze the relationships among selected tasks, skills and personal characteristics. Subsequently, Genge (1991) focused on the administrative practices of thirteen superintendents who were judged by a panel to be among the most effective in the province. A survey approach was used by Van der Linde (1989) to study the preparation, recruitment, selection and career patterns of directors of education in Saskatchewan.

In the mid-1980s, the most important tasks of a superintendent involved working directly with trustees, specifically, in participating in meetings of the entire board, establishing communication with individual members and identifying priorities for action (Green, 1988). Among the most important task areas were policy development, evaluation and public relations. The three most important skills in the work of superintendents were making decisions, delegating responsibilities and being sensitive to the feelings of others. Participants in the study regarded trustworthiness, consistency, intelligence, adaptability, approachability and caring as important personal characteristics. Some potential for role conflict was still evident in that expectations held for the superintendent varied with the positions of the role definers.

Superintendents considered to be highly effective reported that among their highest role priorities were engaging in planning-related activities, communicating and maintaining good relationships with personnel, and providing appropriate programs for students (Genge, 1991). Variations in methods of achieving the priorities reflected variations across school jurisdictions. The superintendents attempted to demonstrate leadership by being action oriented, delegating effectively, setting a personal example and involving stakeholders in decision making. Among the personal factors that they considered important in their effectiveness were skill in dealing with people, having a sense of direction, having sound knowledge, and valuing honesty and integrity. School system politics, time pressures, financial constraints and an oversized agenda served as limits on the effectiveness of the superintendents.

Similar to the situation of nearly three decades earlier, entry into the directorship in Saskatchewan was primarily from a principalship (Van der Linde, 1989). School boards tended to select directors who had gained most of their professional experience in other jurisdictions. Directors were influenced to apply for the position by self-assessments of their abilities; confidence in those abilities was enhanced by formal studies and successful work experience. Managerial skills and interpersonal relationships were significant selection criteria beyond the basic requirements. The major criterion appeared to be the compatibility between the applicant and board members as perceived by the board. Interpersonal relationships were the source both of the most satisfaction and of the greatest frustration for directors of education. In general, the satisfactions experienced by directors outweighed the frustrations encountered in the position.

A different perspective on selection emerged from a study by Rainsforth (1987) into the process used to select community college board members and to determine how they viewed their selection. Results of the study confirmed that the selection process could be interpreted as a dynamic political system which changed over time in response to shifting environmental influences. Although nominations were relatively open, the selection procedures remained close to government and were not open to public scrutiny. The minister exercised considerable latitude regarding selection because of the lack of prescriptive guidelines. Among the final selection criteria used were political affiliation and maintaining a balance in representation. Board members were generally knowledgeable about selection procedures and criteria. Although some disadvantages were perceived in the process, the procedures were generally viewed as superior to alternative approaches.

A comparison of studies completed in the early part of the period under consideration with more recent research suggests that the nature of positions as well as preparation and selection processes have undergone considerable change. However, the research problems have remained fairly similar. Given that answers to questions about roles and preparation needs lose validity due to changing circumstances, the questions warrant periodic re-examination. Furthermore, the research could be extended to numerous other significant administrative positions. To date, no doctoral studies have been completed of selection -- more correctly, election -- procedures for school board members. Similarly, there has been no research into selection and appointment of senior administrators in postsecondary institutions.

Nature of Administrative Work

An emphasis in research on administrators that emerged in the latter part of the 1970s focused on the nature of administrative work. The thrust of most of these studies was descriptive with the longer range objective of developing general understandings, working hypotheses or propositions. A number of researchers used a structured observation approach as the main strategy; others engaged in more intensive and interpretive examinations of the work of administrators.

A general feature of data collection through structured observation involves the actual presence of the researcher in the administrative setting over a period of time. Both mail and verbal contacts, as well as specific activities, are observed and coded. Data are used to construct profiles of what administrators do on a day-to-day basis. In the first of these studies, Duignan (1979) described the administrative behavior of eight school superintendents. Subsequent studies focused on five deans of nursing education (Hannah, 1981), six college presidents (D. J. Allen, 1985) and five principals of grades 1 to 12 schools (Cooper, 1986). Results of these studies indicated a high degree of similarity in the general nature of administrative activities but also revealed some aspects that were unique to each position.

The work of the superintendents who were observed by Duignan (1979) was essentially discontinuous and involved dealing with a variety of problems and issues during a relatively short period of time. Organizing and controlling time was a major source of pressure for school superintendents. Hannah (1981) reported that deans also worked long days, engaged in many activities of short duration, were frequently interrupted and focused on short-range rather than long-range planning. Unlike the superintendents who were not involved directly in instruction, the deans continued to practice consciously the scholarly activities of teaching, research and writing. D. J. Allen (1985) found that college presidents spent a large proportion of working time in verbal contact with senior administrators; scheduled meetings comprised over one half of working time. Most other activities were of short duration and discontinuous.

Cooper's (1986) results indicated that a large proportion of a principal's work involved verbal communication; most interaction with others occurred within the school. In comparison with the work of the superintendents, principals worked longer hours, performed more activities per day and made many more verbal contacts but of shorter duration. Principals controlled their activities by initiating contacts, by delegating work to others and by exerting influence. In spite of the nature of their activities, principals had both short-range and yearly plans.

The political dimensions of administrative work were evident in some of the results. Duignan (1979) concluded that at times the superintendents acted as mediators in disputes, and at other times they engaged in political activity in response to political forces in the environment. Similarly, mediation and arbitration were significant processes in the work of college presidents due to the number of interest groups that placed demands on the office (D. J. Allen, 1985). The college presidents involved others in decision making and delegated responsibility rather than act as the sole decision makers. Both the challenges of work and the status of the position were sources of satisfaction. Hannah (1981) reported that deans relied on advice from faculty or committees for decisions and engaged in entrepreneurial activity related to alternative sources of funding. The principals in Cooper's (1986) study did not appear to be subjected to group sources of conflicting pressures.

Two additional studies focused specifically on the school principal using conceptual bases and methodologies that differed from those used in the preceding studies. The purpose of Moylan's (1988) study was to describe and explain the perspective of one female educational administrator. Various field techniques -- grounded in the theory of symbolic interaction and naturalistic enquiry -- were used to collect data including observations on an average of three days per week over an eight-month period. Evans (1989) used a phenomenological hermeneutic research strategy to inquire into the meaning of being a principal as a way of exploring the broader concept of educational administration. Nine actual administrative situations described by principals during the course of interviews were subjected to an interpretive analysis. Although pursued independently, the two studies reached similar conclusions.

Moylan (1988) identified eight characteristics that were consistently evident in the way the principal performed her administrative work. The terms used to identify these characteristics or qualities are descriptive of their nature: enabler, empathizer, challenger, advocate, collaborator, image maker, loyalist and tactician. An overarching quality which permeated all eight characteristics was that of teacher. A major conclusion emerging from the study was that in order to be an effective elementary school administrator, a principal must also be an effective teacher.

The general intent of the Evans (1989) study revolved around defining the *educational* in educational administration. A specific focus of the analysis was the search for the presence of a pedagogic relationship, usually between the principals and students but also to some extent between principals and teachers. Results of the analysis identified both the presence and absence of the kind of relationship that the researcher believed was desirable and possible. A number of competencies that principals should possess were identified including pedagogic tactfulness and the capacity to be sensitive to pedagogic consequences of mood and atmosphere. The researcher concluded that the practice of educational administration should be a pedagogic practice.

In general, research on the actual nature of administrative work provides a perspective that differs somewhat from the ideal presented in the prescriptive literature. Although there are important variations across positions, certain features such as varied and numerous demands seem to be common to a number of positions. The two research strategies -- structured observation and interpretive case studies -- yield different but complementary insights into the nature of administrative work. While the former identifies the various activities that occupy an administrator's time, the latter studies reveal more fully what meanings the activities have for the administrator. More fundamentally, the structured observational studies seem to accentuate the difference between administration and education while the interpretive studies bring them closer together.

Administrators as Leaders

Although research on administrators from a leadership perspective spans three decades, the number of studies does not reflect a concerted or intensive thrust. Researchers who have conducted studies in this area relied on a limited number of major conceptualizations and instruments. These include the initiating structure and consideration dimensions of the Leader Behavior Description Questionnaire (LBDQ), Fiedler's contingency theory and, more recently, the path-goal theory. Relationships among various aspects of leader behavior and other variables have usually been the focus of the research. Survey research strategies have been dominant, but there are indications of an emerging interpretive orientation.

In the first doctoral study involving the LBDQ, Keeler (1961) tested three basic hypotheses about relationships between the leader behavior of the principal, the morale of teachers, and school productivity as measured by results of grade nine external examinations. Role theory and leader behavior theory formed the conceptual basis of a study in which Miklos (1963) analyzed the structure of expectations that teachers held for the behavior of principals and tested hypothesized relationships among the degree of consensus, the degree of teacher-principal agreement, and the leader behavior of principals in terms of initiating structure and consideration. A conceptualization involving instrumental and expressive functions, as defined operationally by subscales of the LBDQ-XII, was used by Girard (1967) to study differentiation in the leader behavior roles of principals and vice-principals. Perception of leader behavior based on LBDQ concepts was included as a variable in Tronc's (1969) study of promotional aspirations of educators. In one of the most recent studies of leader behavior involving LBDQ measures, Danyluk (1981) examined relationships between the leadership attitudes, leader behavior, and level of self-actualization of principals.

The results of Keeler's (1961) study gave strong support to the hypothesis that principal leader behavior is related to school productivity as well as to the hypothesized relationship between staff morale and productivity. However, the hypothesized relationship between leader behavior and staff morale was not supported. Results of the data analysis in the Miklos (1963) study indicated that relationships between leader behavior and other variables were contingent upon situational factors. Specifically, whether or not principals should hold definite conceptions about their role was contingent upon the degree of consensus about the role. The favorableness of assessments of leader behavior, in terms of high initiating structure and consideration scores, was related to the extent of teacher-principal agreement on the definition of the principal's role.

Subsequent studies confirmed the complexity of relationships involving leader behavior. Principals in Girard's (1967) sample were significantly higher than vice-principals in instrumental leader behavior, but the differences in expressive behavior were not statistically significant. Differential combinations of principal/vice-principal leader behavior styles were not related to teacher satisfaction or rated effectiveness of the leaders. Although the study was based on a theory of dual leadership, results indicated that vice-principals played a subordinate rather than a complementary leadership role in the school.

Some similarities between vice-principals and principals were reported by Tronc (1969). Vice-principals and principals with strong promotional aspirations placed greater emphasis on initiating structure and less emphasis on consideration than did those with low promotional aspirations. The results also revealed that teachers and administrators differed in generally-held perceptions of leader behavior. Relationships involving other attitudinal measures have not been strong. Danyluk (1981) reported that only two of ten hypotheses tested yielded statistically significant results. The general conclusion reached by the researcher was that there is no interrelationship between principal self-actualization, teacher perception of leadership behavior and principal leadership attitudes.

Both general theory about leader behavior and results of studies such as those involving the LBDQ support contingency perspectives on leadership. In general, this line of theorizing proposes that the relationship between the behavior of the leader and other variables is moderated by situational factors. A particular conceptual base for such approaches is provided by Fiedler's contingency theory which has prompted a number of studies. The applicability of Fiedler's theory of leadership effectiveness to the school setting was tested initially by McNamara (1968). The study was replicated by Lavery (1973) in elementary schools in Quebec. Other researchers (McKague, 1968; Hurlbert, 1973) have also used the general theory and specific measures in their studies.

Although McNamara (1968) found leadership styles to be stable over an eighteen-month period, categorizing schools on favorableness of the situation presented some problems. The length of time that the principal had been in the school appeared to be an important moderator of the relationship between style and effectiveness. The researcher concluded that the Fiedler theory did have significance for school effectiveness, was limited by the lack of a valid and reliable index of favorableness, and required some reconciliation with effects of time on group processes. The main hypothesis derived from the contingency model of leadership effectiveness was not supported in the Lavery (1973) study. Some significant findings were related to differences between principals in the French-language and English-language schools in the sample. As compared to French principals, the English principals were more directive, were perceived to have more power and were more prescriptive with respect to teaching methods. In the English sample, female principals were more directive than males and were in schools in which the level of teacher satisfaction was relatively high.

The contingency theory of leadership effectiveness was included in a study by McKague (1968) into relationships among organizational climate, school bureaucratization and leader attitudes. Generally, the findings indicated that principals who were accepted by their staffs and whose behavior tended to be directive were in high morale schools where teachers enjoyed friendly relations, were not burdened with administrative responsibilities and were not out of touch with the functions they were expected to perform. In a study of interpersonal conflict management in schools, Hurlbert (1973) found that principals of varying leadership styles exhibited different attitudes toward conflict and used different methods of managing conflict. For example, relationship-oriented principals were more likely than task-oriented principals to use confrontation as a method of managing conflict among teachers. There was also some clustering among preferred methods of conflict management; principals who favored compromise, withdrawing or forcing were also less likely to use methods of confrontation or smoothing.

Certain aspects of the path-goal theory of leadership were tested by Creed (1978) in a school district setting. On the basis of the theory, predictions were made that factors such as occupational level, role ambiguity and role conflict would moderate the relationship between leader behavior and the satisfaction of subordinates. Results indicated that differences in relationships between leader behavior and the satisfaction of subordinates were associated with specific kinds of leader behavior. The researcher interpreted this as supportive of an essential feature of the path-goal theory, namely, that leader behavior provides guidance, support and rewards necessary for the satisfaction of subordinates.

As in research into the nature of administrative work, the most recent studies have used interpretive case study rather than survey research strategies. Thorpe (1989) derived insights into leadership by interpreting descriptions of the activities of nursing educational administrators and the meanings that they attach to various aspects of their roles. The stories of the thoughts, beliefs, philosophies and activities of the seven participants revealed both similarities and differences across the work environments. Major emphases related to providing a transition within the organization, changing climate and initiating/implementing change. The participants in the study found meaning in their work by focusing on a specific mission. For most of them this involved offering a credible diploma nursing program. The vision that guided them was providing access through the college system to baccalaureate education for nurses. They believed in diploma nursing programs, in faculty members, in student potential and in their personal abilities to administer. Personal and professional values guided their administrative practice, which involved many challenges, as they planned improved nursing education programs.

The limited number of studies that have been completed yield few general insights. Various conceptualizations of leadership and research results support contingency approaches to explaining the consequences of leader behavior. The contingency factors that have been identified in a number of studies appear to be different from those identified in the theories on which the research is based. Some of these factors may be highly situation specific; recognition of these contingencies by the leader appears to be a significant factor in determining the relationship between the leader and group members. Perhaps the major contribution that the studies have made is to confirm the complexity of the phenomenon and the limitations of theories and survey instruments. As in the case of research on the nature of administrative work, interpretive studies open a promising avenue for future research into leadership.

Administrator Characteristics

In addition to studies into administrative roles, the nature of administrative work and leader behavior, research has also been conducted on selected personality and other characteristics of administrators in various positions. Some of these studies are reported in related themes in later chapters; however, five are summarized here because of the specific focus on administrators.

The relationship between (a) administrative training, experience and personality variables, and (b) the administrator's characteristics as a transmitter and receiver of information was examined by Mulford (1971). An experimental design was used to assess differences between groups. Results indicated that involvement in graduate training was related to increased rigidity when preparing to receive information, but increased teaching and administrative experience were related to more flexible structures. Senior administrators were more rigid when preparing to transmit information; practising administrators had lower manipulative tendencies than graduate students.

Nixon (1975) compared three groups of women -- school administrators, teachers matched with administrators on education and experience, and women teachers randomly selected -- on marital status, socio-economic status, role orientations and beliefs about administration. Compared to teachers, the administrators had higher professional role orientation scores, appeared to obtain more satisfaction from their professional roles, and differed in their beliefs about administrators. The majority in all groups believed that the opportunities for the advancement of women teachers were restricted.

The tactics used by senior educational administrators when they were involved in conflict were explored by Loewen (1983) through examination of critical incidents. The analysis revealed that administrators did use specific tactics to achieve closure and were aware of using them. The major tactics included information control, coalition formation, emphasizing rules and regulations, channelling communication, denigration and stalling for time. Specific tactics selected were associated with the parties involved in the conflict. Imposition of rules and regulations tended to be emphasized when the conflict was between senior administrators and teachers. If the conflict involved the board, administrators tended to form coalitions or stall for time. Administrators controlled information to mitigate conflict with principals.

Relationships of locus of control orientation to leader behavior and to job satisfaction among principals was investigated by Curtis (1983). Locus of control orientation refers to the tendency of people to attribute events in life either to themselves (internal) or to outside forces (external). Principals in the sample were predominantly internal in locus of control orientation. Relationships between orientation and various dimensions of leader behavior were not significant. However, locus of control internality was positively associated with intrinsic and overall satisfaction. Experience of principals was negatively associated with degree of locus of control internality.

Identifying and describing factors that influence the professional ethics of school principals was the object of a study by J. R. Jeffrey (1990). Principals reported that they were involved in a growing number of decisions involving ethical issues. However, these issues resulted in a relatively low degree of conflict between organizational ethics and either professional or personal ethics. A wide variety of societal, organizational, professional and personal factors appeared to influence professional ethical behavior. In situations where there was an absence of ethical guidelines, judgements about the rightness or wrongness tended to be made either on the basis of the consequences of a course of action or on the basis of respecting the inherent worth of the individuals involved.

As in other areas of research on administrators, studies into various personal and professional characteristics reveal a high degree of complexity in administrative relationships.

Summary

Research on administrators and on administrative work reflects sporadic and shifting interest in relation to a number of different themes. Although initial attention was given to the role, preparation and selection of superintendents, beginning with the first doctoral study, attention soon shifted to other areas such as leadership. In the late 1970s, a series of studies focused on the nature of administrative work in a number of different positions. Various characteristics of administrators have also been investigated. In each of these themes, research interest appears to have waned only to be rekindled by changing circumstances or alternative research strategies.

In spite of the limited number of studies, the research in this area provides useful descriptive information as well as the base for future studies. The application of various research strategies -- surveys and case studies, quantitative and qualitative, relational and interpretive -- has also been demonstrated. A succession of researchers has made important contributions to the development of alternative conceptualizations and research strategies. The introduction of interpretive strategies seem particularly promising for research on the nature of administrative work and into the meaning that the work has for those who occupy administrative positions.

4

Context of Educational Administration

A purpose common to the studies reviewed in this chapter was to analyze external factors that have implications for various aspects of the administration of educational systems. Research that relates to these external factors may be further categorized according to the specific contextual elements involved. The forty-one theses identified with this area were grouped on the basis of their focus on legal, demographic, cultural or economic factors. A section of the chapter is devoted to each of these themes. Studies relating to political factors are reviewed in a later chapter on policy development and implementation.

Legal Context

The legal context of educational administration has been examined in studies on the legal status of students, school boards, teachers and native peoples. Specific applications of the law such as liability and termination of contracts have also been investigated. The general research strategy involves the analysis of documentary materials -- statutes, case law, historical records -- and the identification of themes that help to define legal practices and decisions.

In the first of these studies, Bargen (1959) analyzed statutory and case law in order to identify the principles that define the legal status of pupils in public school systems. Results indicated that (a) both statutory and common law are essential in defining the legal status of the pupil, (b) pupils rights and responsibilities in separate schools are the same as those in the public schools, and (c) courts uphold pupils' rights but also demand fulfillment of responsibilities. Using a similar methodology, Enns (1961) defined and clarified the legal status of Canadian public school boards. A general conclusion emanating from the analysis was that the school board is a statutory corporation, has limited powers and duties, and is subject to the same provisions of common law as are other statutory corporations. Although the authority of school boards is restricted by statute, the board has more authority and might exercise its powers more vigorously than trustees seem to realize.

Two studies have focused on the legal status of teachers. McCurdy (1964) examined the legal environment in which Canadian teachers practice their profession with specific reference to relationships between teachers and their colleagues, employers and students. Through a similar design, Pornsima (1984) conducted a study of the legal status of teachers in Thailand with appropriate adjustments for the different context.

Results of the McCurdy (1964) study partially supported a conclusion that quasi-judicial bodies -- arbitration boards, boards of reference and discipline committees -- were increasingly shaping the legal status of the teacher. Teachers' organizations and school boards favored the settling of disputes even less formally than is involved in these bodies. The researcher concluded that the legal status of teachers is more firmly established in those provinces where teachers' organizations have been vigorous and effective. The circumstances of teachers appear to be considerably different in Thailand. Although the legal status of Thai teachers is defined in written law, superordinates use their discretion to interpret the law, at times in a flexible manner (Pornsima, 1984). Both the lack of understanding of their legal status on the part of teachers and the use of power by superordinates has potential to erode the legal status of teachers. Variations in the application of the law resulted in preferential treatment of teachers at upper levels of the educational structure which the professional organization was unable to eliminate.

Cooze (1989) analyzed the reasoning applied by courts regarding the legal liability of school boards and teachers for school accidents that result in physical injury to students. A detailed examination of seventy-one court cases revealed a pattern that revolved around themes such as the "careful parent" standard, adequacy of supervision provided, evidence of potentially or inherently dangerous objects or activities, contributory negligence, liability of occupiers and failure to give proper instruction. One of the conclusions was that the law relating to tort liability had remained fairly static over three decades. Results of the study formed the basis for guidelines for school boards and teachers that have potential to reduce injuries as well as possibly to avert court action.

The basis and procedures for termination of contracts has been examined for both teachers (A. K. Harrison, 1980) and nurses (Steven, 1988). Results indicated similarities as well as differences in the two professions. School boards are required to adhere to statutory reasons for termination of which the most common are neglect of duty, incompetence, misconduct and refusal to obey a lawful order of the board. Increasingly, nurses face lawsuits for failing to perform various tasks in accordance with established or appropriate standards, policies or procedures.

In relation to termination of teacher contracts, most provinces have a three-person appeal body; associated procedures are defined by the relevant School Act. Termination decisions have resulted in considerable litigation, and procedures have been altered as a result of successful appeals based on procedural grounds (A. K. Harrison, 1980). In the case of nurses, there are significant variations across cases and geographical locations in awards of arbitration, disciplinary processes of professional associations and disciplinary actions (Steven, 1988). Definitions of important terms such as incompetence, improper conduct and professional misconduct also vary. The researcher projected that changes in health care would likely result in an increasing number of legal, arbital and discipline cases.

Some research into legal factors may involve a much stronger historical component than was evident in the preceding studies. In one such study, the changing provisions for separate schools as found in statutes, common law and regulations of provincial authorities were examined by Fenske (1968). The purpose of a similar study conducted by Daniels (1973) was to define both the legal and the extra-legal status of the Indian community, the Indian parent and the Indian child with respect to education.

Separate schools have evolved from practices in Upper and Lower Canada in the 1841-1866 period, the provisions of the 1867 BNA Act, and the educational structures of Manitoba and the Northwest Territories (Fenske, 1968). More recently the distinctiveness of the formal structure of separate schools resides primarily in the rights of religious minorities to form such schools. Since the state authority requires almost identical educational programs, over the years public and separate schools have become more alike than different.

Local participation by Indians in education evolved slowly but expanded dramatically after 1963 following more than a decade of emphasis on integrated education (Daniels, 1973). The Indian community added certain dimensions to its legal status, which is affected by residence on or off the reserve, through use of power and influence. Although the status of the Indian child is determined by the Indian Act, in disciplinary matters Indian children have the same protection under common law as have non-Indian children.

To a greater extent than is evident in a brief review of this theme, research into the legal context has immediate and important implications for administrative policies and practices. Results of the preceding studies all either explicitly or implicitly offer guidelines for administrative actions involving the legal status of participants in educational organizations. The increasing significance of the legal context of administrative decisions underlines the importance of this area for further research.

Demographic Factors

Although reference to demographic factors is made in several of the studies on educational development, only two studies gave primary attention to population characteristics. Both of these focused on attendance or participation rates. Records were the primary sources of data for these studies, and statistical procedures were the main methods of data analysis.

In the first study, Drolet (1961) attempted to identify demographic factors that contributed to variations in school attendance rates in Quebec from 1901 to 1951. Results of the analysis indicated that (a) attendance rates were heavily influenced by variations in the age structure of the population, (b) attendance rates of males were more subject to influences of demographic and socio-economic factors than were the attendance rates of females, and (c) demographic and socio-economic factors appeared to be independent in their relationship to attendance rates.

The relationship of university participation rates to geographic distances and other home area variables in the western provinces were analyzed by Wagner (1981). Results of data analysis for five universities revealed that participation rates at various distances varied from university to university. The two best predictors of participation rates were distance from the university and average family income. Participation rates reflected within-province competition for undergraduate students; there was very little competition between provinces.

Both of these studies indicate ways in which demographic factors influence the operation of educational systems or institutions. Given the changing demographic composition of the population and the dramatic effect that the changes may have on educational participation, research into demographic factors appears to warrant increased attention in future.

Cultural Factors

Cultural factors associated with education have been examined primarily in terms of the value orientations of different groups. Three of these studies were based on the Kluckhohn theory and methodology; one study was conducted in Newfoundland and two with native groups in Alberta. The general strategy was that of questionnaire survey; however, in some instances the questionnaire was administered by the researcher in an interview situation. Two studies involved schools that espouse particular values.

In the first of the values studies, Kitchen (1966) examined variations in value orientations within Newfoundland society, particularly variations in the values of grade nine students. The results of this research indicated that variations across communities were related to characteristics such as community size, degree of industrialization and population mobility. Students who were more involved in what was defined as modern society differed in value orientations from those who were less involved. Some relationships were also observed between involvement in teen-age subculture, and father's occupation and value orientations.

Differences in value orientations among groups with more marked cultural differences have also been investigated. Gue (1967) studied the value orientations of Indians and non-Indians -- pupils, parents, teachers and administrators -- in isolated northern Alberta communities. In a subsequent study, Bryans (1971) explored differences in value orientations of the student and adult members of different ethnic groups -- Treaty Cree, Lebanese, Metis, French and Ukrainian -- in one school district.

Results of the Gue (1967) study revealed differences in value orientation patterns between parents and pupils, parents and teachers, pupils and teachers, and Treaty and non-Treaty pupils. Teachers with lower amounts of teacher education were more similar to Indian parents than were teachers with the highest level of education. Differences between teachers and pupils in value orientations were less evident for male pupils, for older pupils and for those with extended residential school experience. Bryans (1971) found sufficient differences among adult members of the French, Lebanese and Cree groups to term them culturally different on the basis of applying the Kluckhohn analytical techniques. The students were much closer in value orientations than were the adult members of different groups. Greatest differences between student and adult groups occurred within ethnic groups that were most different from the dominant cultural groups.

The central questions of two other studies revolved more directly around values and schooling or, more generally, faith and culture. In the first, Digout (1979) compared the values and attitudes of high school students in public schools and in Roman Catholic schools based on the Rokeach Value Survey and semantic differential scales. Using a historical/interpretive research strategy, Hollaar (1989) studied the interaction between school and culture in relation to a specific type of school.

Digout (1979) found differences in values/attitudes between students in the two types of schools; however, family and cultural backgrounds seemed to be more closely associated with values and attitudes than were school factors. The researcher concluded that the study lent support to the view that initial family experiences have an enduring influence on values but that other factors are also important. Catholic schools appear to be contributing to maintaining the Christian attitudes/values that have been fostered within the family.

The particular problem of Hollaar's (1989) study was to assess the extent to which the governance structures and practices of Calvinistic/Reformed day schools reflect the espoused values of that faith community. The historical and cultural context of the schools have shaped governance structures in a manner that accentuates parental control over control by the church. Experiences of particular individuals confirm that the Calvinistic world view shapes ideas about governance, that faith does influence governance. The researcher concluded that in order to maintain the integrity of faith and schooling, administrators must exercise an ongoing purposive reflectivity. When such reflectivity is not present, the unique mission of Calvinistic/Reformed schools becomes displaced, and they take on the characteristics of other schools.

Studies into the cultural contexts of education, particularly of differences in value orientations, add a measure of depth to understandings of the relationship between the school and the community or home experiences of students. They reveal the presence of multiculturalism where only a unitary culture may appear on the surface. In addition, the research draws attention to the possibility of individual-school or school-community conflicts that may be grounded in value or cultural differences.

Economic Factors

Studies related to economic factors reflect several different areas of interest. For purposes of this review, the research results are presented in two clusters. The first includes studies on educational finance in general while the second includes specifically those that are based on an investment perspective on education.

Educational Finance

Research into educational finance covers the broad spectrum from macro analyses of the financial needs and resources of provincial educational systems to the analysis of consequences of budgetary restraints. One implicit, if not explicit, theme in the problems investigated relates to equalizing the costs of education. Another theme relates to the identification of variables that determine costs, particularly those which lend themselves to some form of policy control.

Trends in educational costs in the late 1950s and early 1960s prompted several studies of educational finance at a provincial level. H. J. Uhlman (1959) examined the effects of demographic and economic forces on rural education in Alberta while Warren (1962) analyzed educational finance in Newfoundland. Both studies pointed to the need for change. As a result of his analysis, H. J. Uhlman (1959) concluded that there was only a slight possibility of meeting the educational needs of Alberta youth within the existing structure because this would be financially prohibitive. New ways of improving the quality and scope of rural education would have to be sought, and new methods of distributing costs more fully beyond a particular locale were required. Warren (1962) observed that growth and centralization of population had created a demand for vastly improved educational opportunities; provincial expenditure had exceeded that needed to offset increased attendance and inflation. Results of the analysis indicated that there were striking inequalities among districts, that fund distribution favored wealthy districts and that local contributions played a minor role in financing education. Among the recommendations for change were a foundation program, local taxation and matching grants.

Concerns about specific aspects of educational finance have also prompted research. For example, Skuba (1965) examined costs of transporting students in rural areas in the context of grant structures. Fourteen measures of population density were derived and used as predictors of pupil transportation costs. Comparison of several regression equations revealed that the equation based on four of the best predictor variables provided the lowest range of differences between standardized and actual costs of pupil transportation.

A number of other studies also focused on educational expenditures. In a macro analysis, Paterson (1967) examined the effect of policy and non-policy variables on educational expenditures from 1941 to 1961 in various provinces. The effects of inflation on school operation expenditures from 1957 to 1965 in Alberta were investigated by Atherton (1968). Sharples (1971) examined the effect of changes in provincial economic growth on educational expenditures, assessed property values, property tax revenues and provincial grants from 1930 to 1966. In one of the few studies that have focused on financing postsecondary education, Hyman (1972) examined the extent to which variations in university per student operating expenditures could be explained by economic, population, fiscal resource and university program factors.

Results of Paterson's (1967) analysis revealed that the crucial non-policy determinant of expenditure was level of income per capita. Among the policy variables that were related to expenditures were teacher salary levels, school size and the proportion of enrollment beyond statutory leaving age. Provincial levels of expenditures were related to personal income per capita, to levels of income components, to teacher salary costs and to proportions of secondary school enrollments. Atherton's (1968) study involved, in part, the development of a set of price indexes appropriate to the measurement of price level increases of educational inputs. These indexes indicated that the price of teaching service increased much more than did that of non-labor inputs. Analysis of expenditures revealed that as much as 82 percent of the increase was accounted for by increasing price levels. The increases affected smaller jurisdictions more than larger jurisdictions. Further analysis revealed that increases in the quality of inputs had been of benefit mainly to urban secondary school pupils.

Sharples (1971) found that per capita educational expenditures were sensitive to changes in population and per capita disposable income. Property tax revenues did not keep pace with the demand for education, and provincial grants did not seem to serve as a substitute source of funds. The researcher proposed a method of fiscal planning for predicting future demand for education and for its financial support.

Results of Hyman's (1972) analysis indicated that there were regional variations in changes in university expenditure over time. Factors related to the fiscal resources of individual provinces were instrumental in changes in per student expenditure levels; however, there were no common underlying economic determinants. The analysis also revealed that there was no uniformity in the relationship between revenue sources, programs and expenditures either within or among universities.

An interest in costs of education prompts additional questions about the effects of expenditures in different areas. The relative influence of policy and non-policy variables associated with expenditures for school operations on academic achievement were examined by Gillis (1972). Results of the analysis indicated that when the possible effects of non-policy variables were taken into account, no policy variables were significantly associated with academic achievement. The researcher concluded that when the background of students is controlled, many of the input and contextual factors which are traditionally used in evaluating the quality of a school account for very little of the variance in academic achievement.

The effectiveness of the school foundation program in Alberta in achieving fiscal equalization was investigated by Deiseach (1974) and Jefferson (1982). In the first study, the researcher examined the extent of fiscal equalization of school board revenues between 1961 and 1971. Results indicated that the basic school tax burden tended to be equalized among rural areas for the period studied. However, decreasing variability in foundation payments between 1962 and 1968 was followed by increased variability in 1970 and 1971 due to the application of a revised finance formula. In general, for the majority of school districts, equalization of grant revenues occurred under the Foundation Program.

Jefferson (1982) examined alternative plans to the School Foundation Program to determine whether these might have significantly increased the level of fiscal equalization in the 1957-1980 period. In general, these alternative plans would have decreased but not eliminated the existing inequities. The researcher concluded that while the alternative plans may result in greater equalization, they carry with them potential for imposing unfair tax hardship on the local ratepayer. The particular allocation formula used is related to the extent to which equalization is achieved.

A subsequent study by Schmidt (1988) focused on assessing the extent to which a grant intended to enhance fiscal equalization across school jurisdictions in Alberta actually achieved the objective. Results indicated that the specific grant introduced in 1985 was superior to those that were replaced. However, the situation of less wealthy jurisdictions had not improved substantially in relation to the more wealthy districts. The explanation of the limited effectiveness relates to certain provisions that resulted in wealthy jurisdictions also benefiting from the grant. Consequently, fiscal equalization would be improved if these provisions were removed. More generally, a strong contributing factor to fiscal disequalization appeared to be the increasing proportion of local compared to provincial funding for education.

Equity of financing of programs in ten two-year colleges was the central question in Zinner's (1987) study. Of particular interest was the equity of financing for six academic program clusters, equity of financing over time and equity among colleges. The specific concepts of equity that guided the study were formula funding for education and equity among levels of education. Results of the analysis revealed that funding for different types of programs was equitable over time but that funding among program clusters was not equitable. A revised funding formula which would enhance equity was proposed on the basis of the analysis. Each academic program cluster appeared to have unique characteristics. On the basis on an economic analysis alone, academic upgrading and agriculture programs could not be justified in a comprehensive college.

In addition to the interest in equity of finance, researchers have also examined the consequences of trends such as declining enrollments and budgetary restraint. The differential effects of declining enrollments on school board revenues and expenditures were investigated by Meek (1979). Through a survey design, Ell (1988) investigated the perceptions of faculty at eleven universities regarding the impact of financial constraint as well as their preferences for institutional responses. The findings of Meek's (1979) study indicated that, in a period of declining enrollments, school boards were not able to adjust their expenditures downward to match declining enrollment-related revenues; smaller jurisdictions were affected more adversely than were larger jurisdictions. A policy implication proposed by the researcher was that special purpose funding should be provided in inverse proportion to jurisdiction size in three categories.

University faculty members considered financial constraint a significant problem (Ell, 1988). Although there were variations across provinces and universities, faculty reported that constraint had a negative impact on the quality of instruction, on their morale and socio-economic status, and on the prospects of achieving their career aspirations. Faculty members expressed a preference for response measures that tended to be some distance removed from their professional work. Included among acceptable responses were lobbying for additional funds, taking conservation measures, involving faculty, developing voluntary alternatives to dismissal and expanding programs. Reductions in academic support and remuneration were deemed to be unacceptable forms of response. The researcher suggested that more faculty involvement should be considered in developing institutional responses to financial constraint.

A possible specific response to financial constraints -- adopting a marketing philosophy and related practices -- was explored by Michael (1991). Administrators in postsecondary institutions perceived that the attitudes of the public and of government regarding funding were changing and resulting in real financial constraints. Specific concerns related to declining resources, inadequate government grants and the need to recruit high quality students. The various forms of revenue generating, efficiency enhancing and coping strategies that had either been adopted or were under consideration contributed to increased competition among institutions. Institutes of technology engaged in marketing activities to the greatest extent while private colleges engaged least in activities such as marketing research, program planning and establishing marketing offices. Although many of the administrators were unsure about the implications of adopting a more market oriented philosophy, they predicted increased marketing activities in future, particularly on the part of older and larger institutions.

The substantive focus of research into educational finance relates to the financial resources required by educational systems and organizations, the sources of the financial support and the factors that influence levels of support.

This line of research is clearly relevant to resource acquisition and allocation processes. Some aspects of the research reveal the interrelationships of economic and other contextual factors such as demographic characteristics.

Education as Investment

The economic benefits of investing in education have been examined usually in relation to specific programs but also at a macro level. Most of these studies have been grounded in human capital theory and have used either present value or the rate-of-return as the measure of returns on the "investment." Sources of data tend to be primarily records, but questionnaires have also been used to collect data.

In one of the first studies that relates to this general area, Husby (1968) examined the relationship between educational attainment and earnings, and made comparisons across provinces. Strong positive relationships were found between average provincial education levels and average provincial income levels. Within each province increased schooling was found to be directly related to annual and lifetime earnings. Interprovincial differences in earnings appeared greatest for persons with lesser amounts of education. In general, the results indicated that differences in educational attainments of adult populations were more closely related to income differences than were each of several other factors considered.

The first rate-of-return analysis was conducted by Dupuis (1968) on investment in graduate studies in educational administration. Rates-of-return were found to be much higher for master's and doctoral candidates than those reported for similar studies in other areas of education. Within this generally high rate there were variations in costs, benefits and rates-of-return between subgroups of degree candidates.

Returns to other university programs have also been the focus of studies. Wilson (1970) analyzed monetary returns to students who pursued undergraduate degree programs in engineering, arts, science or education in Alberta. The need to analyze factors that may influence students to seek places in various university programs prompted Galabawa (1989) to undertake a cost-benefit analysis of private returns from selected programs offered by the University of Dar-es-Salaam. The results of the studies revealed the effects of contextual differences.

Wilson (1970) found that in terms of discounted marginal lifetime earnings, the ranking of investment options for eighteen-year olds was engineering, teacher education, arts or science. A different ranking resulted from using internal rates-of-return. In general the results showed that university education was profitable not only for high school graduates but for older persons as well. The variations in results suggested that internal rate-of-return analysis should be used in conjunction with present value analysis.

Results of Galabawa's (1989) analysis indicated that private expenditures were low and returns were high, primarily because university education in Tanzania was heavily subsidized in terms of students' living expenses, tuition and transportation. There were differences across programs in earnings and in private rates-of-return; from an investment perspective, law and arts were more attractive than other programs. The researcher concluded that workforce planning should take into account both the monetary benefits and career preferences of individuals and not just social needs as defined by planners and policy makers.

The returns to teacher education were investigated by Dibski (1970) and Wallace (1970); the former study focused on different groups of students while the latter focused on vocational education programs. The results of Dibski's (1970) study confirmed that there were variations between sex and age groups on profitability of training. However, additional training was profitable under all conditions. Comparisons with similar studies indicated that private returns for males were equal to returns averaged by male teachers with degrees in Canada. Private returns for female graduates in teacher education in Alberta were higher than those for male university graduates across the country. In the analysis of vocational education teacher training in Alberta, Wallace (1970) found that private monetary returns varied across programs. In general, the monetary returns to investment in the B.Ed degree justified the costs incurred by tradesmen in pursuing further education. This resulted from the financial assistance available for the first year and from special clauses in salary agreements. The teacher education alternative would not be financially attractive if either of these was eliminated.

The monetary returns of technical education were examined by Henry (1972) and Maliyamkono (1975). Results of the study of engineering technology programs indicated high internal rates-of-return but only moderate present values. Because of the high opportunity costs involved in transferring at an older age, the highest age for profitable entry tended to be low even though the payback periods were short. Henry (1972) concluded that there was no need for large-scale increases in enrollments since the returns were not excessive. In his analysis of five manpower training programs, Maliyamkono (1975) found that there were differences in present values and rates-of-return among the programs. The values were higher for those who terminated than for those who completed some programs. Above average internal rates-of-return were observed for individuals who had worked before training. Private benefits were generally greater than social benefits.

A study of the monetary returns to investment in non-university health personnel training in Saskatchewan by Philippon (1979) indicated that persons appeared to be attracted to such training for reasons other than expectations of increased monetary returns. There were substantial differences among twelve training programs, several of which yielded negative returns. The monetary returns for the latter programs improved with higher participation by females.

A more global perspective on investment in education was taken by Gabregiorgis (1979) in a study of the social and private financial returns to different amounts of secondary education of the male labor force in the Bahamas. Results of the analysis confirmed that completing one or more secondary grades was financially beneficial to the investor and to the society; however, the magnitude of profitability was highly contingent upon assumptions about benefits. The social and private returns appeared to be higher than in other countries. The results of this study support the concomitant use of present value and internal rate-of-return models in evaluating the economic value of education.

Summary

The research themes relating to contextual factors all have relatively early beginnings. Studies into legal and economic factors were initiated in the late 1950s, and the first study of demographic factors was completed in the early 1960s. Research into cultural factors was initiated in the mid-1960s. Within each theme there have been shifts in emphasis; for example, research on education as investment dates only from the latter 1960s.

Taken together, the studies reviewed in this chapter serve to contribute to a broadened understanding of the significance of environmental factors for the administration of education. Studies into the legal context have contributed to clarifying the legal status of pupils, of teachers, of school boards and of native peoples. Demographic factors have been related primarily to attendance and participation rates. Cultural factors have been examined mainly in terms of value orientations which have confirmed the presence of identifiable subcultures in particular geographic settings. Research on economic factors has tended to focus on two major areas: educational finance and education as investment. The first group of studies confirms that financing education is a complex area, particularly when criteria such as equity and program quality are introduced into the analysis. The studies into education as investment have tended to confirm that various types of educational programs are a good investment both for the individual and for society; however, the degree of "profitability" varies with the nature of the program and the characteristics of the individual.

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Organizational Analysis

The analysis of organizations that is reported in fifty-six doctoral theses has progressed in relation to a number of different themes. One theme involves developing comprehensive descriptions of particular organizations, usually based on conceptualizations that purport to be generally applicable. A second theme relates to the analysis of the structural characteristics of organizations. Attention has also been given to the effects or effectiveness of various structural arrangements. What is sometimes termed the primary subsystem in educational organizations -- teaching/learning processes -- has also been researched. A relatively recent theme, which reflects a structural perspective, relates to the relationship between a focal organization and other organizations in the environment.

Describing Organizations

The historical development of organizations and their operation at the time of a study have been of interest to a number of doctoral researchers. In some of this research, the main emphasis was on testing the appropriateness of a particular analytical model for examining a certain type of organization while in others the intent was to develop a comprehensive description of a specific organization. The usual research strategy was that of a case study involving both documentary and interview data sources.

Two types of organizations, teachers' associations and school trustees' associations, have been the focus of comprehensive descriptions. Concepts derived from interest group theory were used by Odynak (1965) to analyze the objectives and functions of the Alberta Teachers' Association. McDowell (1965) applied the Bakke model of organization to examine the development and dynamics of the Saskatchewan Teachers' Federation in relation to four issues: type of organization, determining teacher salaries, selection and preservice education of teachers, and role in inservice education. The same analytical model was used by Roberts (1966) to document the historical development of the Alberta School Trustees' Association and to define its main characteristics.

The first goal of the Alberta Teachers' Association was to secure legitimacy; over time procedures were institutionalized, a succession of goals was established and increased attention was given to maintenance activities (Odynak, 1963). The researcher concluded that the Association had an influence on education and that collective bargaining was an overriding concern. In actual operation, the Association appeared to have bureaucratic characteristics in which permanent staff and an active minority exercised control. Legitimacy in the Saskatchewan Teachers' Federation was established through affiliation of local bodies and statutory recognition (McDowell, 1965). After two major salary goals were achieved, attention shifted to teacher education and certification. Professional development activities were of relatively recent origin at the time of the study.

Political events appeared to have been of prime significance in the development of the Alberta School Trustees' Association (Roberts, 1966). A mutual influence relationship existed between the Association, its members, the provincial government and teachers. Until the early 1960s the main emphasis was on maintenance activities; subsequently the emphasis shifted to sponsoring change and to assuming an initiating rather than a reactive stance in educational development. Although the Bakke model proved to be generally satisfactory for organizational analysis, both McDowell (1965) and Roberts (1966) concluded that the model appeared to require further development for application to organizations such as teachers' and trustees' associations. In particular, the researchers indicated that the possibility of conflict among activities should be explicitly recognized in the conceptualization.

A questionnaire survey research strategy was used by R. A. Bosetti (1975) to compare six postsecondary, non-university organizations on eleven dimensions of institutional functioning as these were perceived by faculty and administrators. Results of the analysis confirmed that the observed characteristics were congruent with formal purposes and roles; however, administrators perceived higher degrees of congruence than did the faculty members. Major characteristics of these organizations included giving low priority to the intellectual/aesthetic extra-curriculum, placing few personal restrictions on people, giving low priority to solving social problems, emphasizing high quality instruction, providing employment related programs, placing low priority on extending human knowledge and adopting a reactive stance to change.

In contrast to the approach of the preceding studies, Valentine (1988) collected qualitative data through a number of different methods -- observation, analysis of documents and interviews with key participants -- over a twelve-month period in studying a hospital school of nursing. The specific question addressed by the researcher was whether women nurse educators bring unique orientations to the workplace that have implications for the administration of organizations staffed predominantly by women. Two major perspectives were brought to bear on the analysis and the interpretation of data: concepts of a "female world" and the "world of nursing." Results indicated that the culture of the school was influenced by social activities which facilitated group cohesion and conflict resolution, by supportive collegial relationships, by formal meetings which enhanced interpersonal relationships and by an ethic of consistency in treatment of students. Administration was characterized by a search for consensus, collaborative relationships and conflict resolution. A major conclusion reached by the researcher was that the nurse educators brought unique orientations to the school which reflected aspects of both the female world and the world of nursing. These orientations pervaded both formal and social activities in the organization.

Results of these studies confirm that a broad range of concepts and methodologies may be brought to bear on developing descriptions of educational organizations. However, modifications may be required in some cases, and the rigid application of models appears inadvisable. Increased use of field research strategies has potential for yielding insights into the distinctive characteristics or qualities of organizations.

Analysis of Structure

In addition to the holistic approaches used in the preceding descriptions, organizational analysis has also been based on the examination of various structural characteristics. Research in this area has been influenced heavily by concepts derived from bureaucratic theory -- hierarchical control, specialization, formalization and standardization -- and specific methodologies such as those associated with the Aston studies. The general research strategy has been that of a relational survey involving data collection by questionnaire and quantitative methods of analysis. However, alternative approaches to the analysis of structure have also been explored.

Bureaucratic Characteristics

Although most studies have tended to assume the applicability of Weber's bureaucratic model and derived concepts to educational organizations, some have focused specifically on questioning this assumption. In the first of the studies in this area, MacKay (1964) tested the applicability of the bureaucratic model to schools and examined the relationship of bureaucratic dimensions to teacher characteristics as well as to selected input-output measures. As one aspect of his study, Robinson (1966) addressed the question of the degree of compatibility between professional orientations and bureaucracy as an ideal organizational form for schools. Subsequently, the applicability of Weber's model of bureaucracy to schools was tested by Allison (1980) through a conceptual approach.

Analysis of data collected by MacKay (1964) in thirty-one schools revealed differences in the extent to which bureaucratic characteristics were evident, and five modal profiles were extracted. The bureaucratic characteristics other than technical competence correlated negatively with rated school effectiveness. The researcher concluded that the traditional bureaucratic model was not descriptive of schools, that technical competence was a non-bureaucratic characteristic common to all schools and that teachers desired a certain degree of bureaucratization in the organization of schools.

As a result of investigating the relationship between the professional role orientations of teachers and bureaucratic dimensions of schools, Robinson (1966) also concluded that the classical model of bureaucracy was not applicable to schools but that the results supported the theory of a professional model of bureaucracy. Professional role orientation was not related to the perceived degree of bureaucratization along any of the six dimensions; however, professionalism scores were related to the perceived desirability of specialization, impersonality and technical competence.

Allison's (1980) approach to the question involved constructing two models on the basis of a review of relevant literature. The first was a detailed reconstruction of Weber's model of bureaucracy, and the second was a comparable model of the public school. As a result of comparing the two models, Allison concluded that Weber's model did not appear to serve as a valid guide for conceptualizing schools; however, the Weberian approach was regarded as having potential for yielding insights into the nature of educational organizations.

In spite of doubts about the appropriateness of the general bureaucratic model for conceptualizing schools, specific concepts or characteristics have been applied in numerous studies. The research has involved exploring relationships between bureaucratic characteristics and other variables such as student alienation (Kolesar, 1967), communication about structure (Mansfield, 1967), role orientation (Anderson, 1968; Eddy, 1968), teacher attitudes concerning autonomy (O'Reilly, 1968) and leader behavior of school superintendents (Richert, 1968).

A first step in Kolesar's (1967) investigation of the relationship between student alienation and the type of bureaucratic structure of high schools was to categorized schools as monocratic, collegial or punishment-centered. Measures were then obtained on dimensions of alienation. Students scored highest on powerlessness followed by meaninglessness and self-estrangement. Hypothesized relationships between bureaucratization and alienation were only partially supported. The researcher concluded that the bureaucratic types were useful in describing school organizational structure but that the dimensions of alienation merited further attention.

Mansfield (1967) observed substantial differences in the extent to which principals of elementary schools had communicated their opinions about bureaucratic structure to teachers. Attitudes toward desirability of bureaucratic structure were directly related to the observed degree of bureaucratization. On the basis of differences in bureaucratization, the researcher concluded that degrees of bureaucratization were more a reflection of school district policy than of school policy.

The focus of a study by Eddy (1968) was on relationships among school bureaucratization, local-cosmopolitan role orientation, satisfaction with organization and teacher characteristics. In general, teachers' perceptions of organizational characteristics were consistent with descriptions provided by superintendents. The results of data analysis indicated that (a) teachers were more satisfied with the organization of the higher bureaucratic schools, (b) locals were more satisfied with organization structure than were cosmopolitans regardless of the perceived characteristics, and (c) locals and cosmopolitans differed on a number of personal and professional characteristics.

Role orientations of teachers and principals were also investigated by Anderson (1968) but in terms of bureaucratic rather than local-cosmopolitan concepts. Results indicated that a bureaucratic role orientation was positively related to the level of satisfaction and was generally compatible with the nature of work in schools. Teachers and principals did not differ in bureaucratic role orientations, and education level was inversely related to such an orientation. A hypothesized positive relationship between authoritarianism, as measured by the F-scale, and bureaucratic role orientation was supported by the results of the data analysis.

On the basis of his investigation into the relationship between standardization in schools and teacher attitudes concerning autonomy, O'Reilly (1968) concluded that teachers perceived the extent of standardization to be compatible with their need for autonomy. However, there also were indications of some dissatisfaction with standardized practices. Of the three areas investigated -- control of students, evaluation of students, and selection of content -- the latter was the most highly standardized in the schools and also the greatest source of dissatisfaction.

In contrast to the preceding studies which involved schools, Richert (1968) focused on the bureaucratic characteristics of school districts. Results of the analysis indicated that school districts differed on a unidimensional measure of bureaucracy. Principals tended to perceive higher degrees of school district bureaucratization than did the superintendents. Those superintendents who were designated as chief executive officers were higher in both initiating structure and consideration than those who were not, and the districts in which they were employed had higher bureaucratization scores.

Aston Approach

A methodology was developed at the University of Aston, England, during the 1960s to describe dimensions of organizational structure. In general, the methodology involves scaling the interview responses of senior administrators to questions about the structure of an organization. The Aston "approach" has been tested in colleges (Newberry, 1971; Heron, 1972) as well as in schools (Kelsey, 1973; Sackney, 1976).

The Aston methodology was used by Newberry (1971) to describe the organizational structure of colleges in an investigation of the relationship between structure and selected variables. The results revealed wide variations in structural and contextual variables between colleges. Two underlying dimensions -- behavior control and role structure -- were identified, and strong relationships between structural and contextual factors were evident. Heron (1972) applied the Aston taxonomy in describing the structural development of community colleges. The results of the analysis indicated that there were identifiable growth stages. Over time the structure of the colleges moved along a continuum from being unspecialized, unstructured, decentralized and low in autonomy toward increasing specialization, structure, centralization and autonomy. All colleges had reduced administrative spans and a higher proportion of administrators as they grew older.

The Aston approach also served as the methodological basis for a study in which Kelsey (1973) constructed measures of school structure and operation that could be used in two cultural contexts. The refinement of the instruments resulted in the identification of two sets of items -- personalization and acceptance -- in workflow diversification. Functional specialization did not appear to be as important in schools as in other organizations. The researcher concluded (a) that an ecological model was a valuable tool, (b) that the study of school structures needs to take into account district administrative structures, and (c) that comparisons should take into account proximity of units to workflow or production processes.

The applicability of the Aston methodology to schools was tested by Sackney (1976) in a study that included examining the relationship between structural and climate variables. Relatively wide differences were found in structure scores, and the underlying dimensions appeared different from those in the original studies. Higher morale (esprit) scores were associated with higher specialization, higher documentation, lower standardization and lower centralization. Teachers preferred principals who were personal and informal, and who did not supervise performance too closely. Specialization was the best predictor of the extent of esprit.

Alternative Approaches

Structural features of organization have been analyzed using concepts and methods other than those associated with bureaucratic characteristics. Among the alternatives are focusing on interaction patterns, on the proportions of members in various categories or on communication patterns.

The nature of interpersonal influence structures and the relationships of these structures to other characteristics were studied in a secondary school by House (1966). In this particular school, all but six teachers were members of one integrated group; however, there were differences between the social structure and the influence structure. The principal, who was the most influential person, was actively engaged in improving instruction and fostering innovation. Although teachers were generally satisfied with their own perceived degrees of influence, they did desire to have more influence on processes directly related to instruction.

Both C. C. Uhlman (1972) and Blowers (1972) conducted studies that involved conceptualizing the configuration of an organization in terms of the proportion of personnel in various categories. More specifically, the studies focused on the relationship between selected personnel and salary ratios and other organizational variables in school districts.

Results of the C. C. Uhlman (1972) study indicated that the largest school districts had the lowest mean administrative, instructional and total staff ratios but the highest mean support and non-instructional ratios. Administrative ratios correlated negatively with total number of pupils, total number of staff and mean teacher qualifications but positively with size and district taxation per pupil. An index of geographic area, square miles per school, was associated with the greatest percentage of variation for administrative ratios. In a study conducted in a different province, Blowers (1972) found that district size was not an important factor in explaining variations in personnel and salary ratios. However, there were some differences among types of school districts on salary and personnel ratios. At the time of the study, superintendents indicated that priorities for instructional personnel were in areas such as counselling, curriculum and library; in the non-instructional category, high priority was being given to teacher aides, in-school clerical and building maintenance personnel.

The complexity of communication patterns lends itself to analysis in terms of various conceptualizations and techniques. In a particularly innovative approach, Adams (1973) developed a system of classification based on models in the fields of botany and geomorphology. The classification method, which was termed "mesh analysis," proved to be a useful technique for examining communication patterns within a hierarchical structure. A series of propositions relating personality and organizational structure to communication, which could be tested empirically using the models and methods advanced in the study, was developed.

Cultural Context and Structure

Just as the applicability to educational organizations of particular analytical models has been questioned, the assumption that such models are valid cross-culturally also warrants examination. Only two studies in addition to that of Kelsey (1973) have addressed this issue, one more directly than the other. Mainali (1985) explored similarities and dissimilarities in the organizational characteristics of two universities in different cultural contexts -- Alberta and Nepal. The major variables were centralization, formalization, satisfaction with structure and overall job satisfaction. Cultural variables were measured in relation to conformity, individualism and tolerance of uncertainty. An instrument that reflected six bureaucratic characteristics was used by Anantrasirichai (1988) to study the structural features of units responsible for supervising primary education at the provincial level in Thailand.

Mainali (1985) found that, compared with the University of Alberta, the Nepalese university was more centralized and formalized, and placed more emphasis on rules and periodic supervision. Compared with their Nepalese counterparts, the University of Alberta professors expressed greater satisfaction with the way the university was structured and reported greater overall job satisfaction. Professors at the University of Alberta were less inclined to conform to social and organizational standards and authority than were professors in Nepal. The Nepalese were less individualistic and had lower tolerance for uncertainty. There were both similarities and differences in relationships among variables in the two contexts; however, the dissimilarities outweighed the similarities. For example, the relationships between formalization and satisfaction were reversed. The cultural variables were also dissimilarly related. These differences call into question the assumptions of a culture-free or universalistic organization theory. However, caution must be observed because contingencies such as size and state of technology were not controlled.

Anantrasirichai (1988) attributed the marked differences between bureaucratic characteristics of supervisory units in Thailand and educational organizations studied previously to the cultural and social context. The structural characteristics of the units tended towards an autonomous climate, self-imposed standards of control, informal authority, non-technical bases for work assignment, precisely specified procedures and centralization of authority. Members of units were generally satisfied with the job situation. Higher levels of satisfaction were associated with a favorable supervisory climate, less emphasis on hierarchical authority, greater procedural specification and more objective bases for work assignment and for promotion.

Results of these two studies suggest the advisability of caution in assuming the equivalence of research findings from different cultural contexts or in generalizing conclusions across such contexts. Similarly, research procedures and strategies developed for one setting should be examined critically before they are applied in another.

An Alternative Model

In contrast to the empirical orientation of most research on organizations, paradigm clarification was the focus of a study in which Deblois (1976) developed an alternative model of organization based on the liberation literature of Third World writers. The liberation model was developed within a three-dimensional framework: a view of man, man and his world, and man's organizational actions. In the model, human beings are viewed as being endowed with a consciousness that enables them to understand and to transform social reality. The discussion of culture and environment revolves around a much higher degree of interaction than is normally the case in other conceptions of organizations. New concepts such as cultural invasion and cultural synthesis were required to describe organizational actions within this alternative model.

Structural Effects

The extent to which structural characteristics or features make a difference in the functioning of organizations has been explored in different ways. Some of the studies have involved general structural features and effects while others have focused more directly on particular structural characteristics. The predominant research strategy in these studies was the relational survey.

General Effects

Possible relationships between organizational variables and student learning or instruction were examined in three studies. The major purpose of a study conducted by Greenfield (1963) was to examine the extent to which variation in pupil achievement is associated with each of classroom, school and district characteristics. Hersom (1969) analyzed differences in resource acquisition behavior that might influence the learning environments in schools. In the third study, Byrne (1985) explored a potential relationship between the organizational and instructional characteristics of colleges.

Results of Greenfield's (1963) analysis confirmed that there were significant effects on student achievement due to classes, schools and districts. In the analysis of variance, sources between classes, schools and districts accounted for 19, 3 and 10 percent of total variation respectively. The remaining 68 percent of variation was associated with residual sources in pupils such as intelligence, motivation and socio-economic background. The researcher concluded that organization of educational systems has significant effects on pupil achievement.

In Hersom's (1969) study organizational performance was defined as success in acquiring human, material, time and space resources. Results of the data analysis indicated that schools differed in structural profiles and that these profiles were related to variations in resource acquisition behavior. On the basis of the results, the researcher concluded that teachers and administrators might deliberately modify organizational activities within schools in order to influence their contributions to the total learning environment.

Byrne (1985) addressed the research problem of the relationships between organization and instruction by comparing structural characteristics of two colleges that espoused different approaches to instruction. A description of the colleges confirmed differences in instructional characteristics such as delivery techniques, location and scheduling of courses, roles of students and faculty, and admission criteria. Among the differences in organizational characteristics were those relating to structure, administrative control, decision making, policies and procedures, and terms of employment. Although the design of the study precluded making generalizations, the results provided support for conducting additional research into the relationship.

Structure and Effectiveness

The extent to which organizational structure makes a difference in the productivity or the effectiveness of the operation of educational organizations has been addressed directly in a number of studies. In the first of these studies, Hassen (1976) investigated relationships among the variables of structure, technology and organizational effectiveness in twelve departments of a community college. Using a survey design, Rourke (1983) explored the relationship among teachers' ratings of school effectiveness, professional role orientation, administrative structure and professional work interaction in a sample of elementary schools. A study by Morgan (1986) was designed to identify operational conditions that were instrumental in enabling an organization to meet prescribed goals. Giles (1987) explored the administrative operation and organizational culture of a school district within an organizational effectiveness framework. Subsequently, Highett (1989) combined perspectives on organizational effectiveness and school effectiveness to explore perceptions of three constituent groups -- superintendents, principals and parents -- in South Australia. In more recent studies, Machura (1991) investigated relationships between effectiveness of high schools and selected administrative and organizational factors while Elfu (1991) focused on the effectiveness of university departments.

Hassen (1976) found little support for a relationship between pairs of structure, technology and effectiveness variables; however, there were some general trends at both a department and an individual level. Regardless of the characteristics of the technology, high effectiveness was associated with the structural characteristics of low formalization and high expertise.

Results of Rourke's (1983) study indicated that four out of five dimensions of professional role orientation were closely associated with ratings of school effectiveness, the strongest being the teachers' belief in the importance of a professional knowledge base. Functional specialization, a structural variable, was also closely related to ratings of school effectiveness. When compared to their counterparts with low scores, teachers with high professional role orientation scores tended to rate their schools as more effective, to interact more with the principal and to interact more with each other.

Councils responsible for the provision of adult education in a specific geographic area as part of a system of recurrent education were the focus of

Morgan's (1986) study. Respondents identified a broad range of organizational characteristics, employee characteristics, environmental characteristics and managerial policies and practices that were important to the operational effectiveness of the councils. A substantial proportion of these factors was actually present in council operations. Levels of achievement of operational effectiveness was associated with age, size and rural-urban locations of councils. Older, larger and rural councils tended to achieve a higher level of operational effectiveness than did those with the opposite characteristics.

Giles (1987) interpreted the differences between actual and preferred amounts of attention given by school district central office administrators to administrative goals and behaviors, organizational structure characteristics and environmental change as an indication that administrative operations were less effective than respondents would have liked. The dominant characteristics of the organizational culture did not seem to reflect fully those identified in the literature on effective organizations. For example, a strong action-orientation and a value-driven philosophy did not characterize the administrative operations. Central office administrators appeared to be distant from schools; other respondents expressed only a limited amount of belongingness. Although a moderately strong sense of mission was apparent, members of the district believed that the mission was not being achieved to the desired level. These discrepancies could serve as opportunities for administrators to enhance the culture of the district.

The specific focus of the Highett (1989) study was on criteria used to judge effectiveness, constraints on the attainment of effectiveness and parental response to perceived ineffectiveness. All three groups -- superintendents, principals, parents -- rated principals and schools from moderately to highly effective but differed in emphasis on specific factors. Among the factors that entered into a judgement of effectiveness were the extent to which (a) principals engaged in activities to provide structure, (b) teachers were improvement oriented, (c) the school was student centered, and (d) parents were supportive of the school. Ratings of overall effectiveness were related primarily to perceived student centeredness by parents, to active engagement by principals, and to parental support by superintendents. Inadequate finances and lack of teamwork were perceived to be major constraints on attainment of school effectiveness. Parents reported that their problems were likely to be resolved when principals listened, negotiated strategies for resolution and followed up on a problem.

A study conducted by Machura (1991) into the effectiveness of senior high schools yielded results consistent with those of previous research pointing to the significance of the principal in creating conditions that contribute to school effectiveness. The conditions related to both structure and climate as well as to the behavior of the administrator. Ratings provided by teachers on three factors -- overall effectiveness, overall staff satisfaction and school pride -- served as the basis for differentiating between more effective and less effective schools. Principals in the more effective schools, as compared to those in less effectives schools, engaged more frequently in behaviors that emphasized being visible, established school-wide goals, emphasized high standards of performance, exercised diplomacy, managed the decision making process to the satisfaction of staff and acted as spokespersons for the staff. The degree of decentralization to groups, committees and task forces of administrative functions and decisions was higher in the more effective schools. In the more effective schools greater emphasis was also placed on student achievement, administrative leadership, support for school activities, student attentiveness and teacher recognition.

The criteria considered to be important in assessing the effectiveness of academic departments, factors that constrain effectiveness and effectiveness ratings were examined by Elfu (1991) for twenty-eight departments in one university. Deans, department chairs, faculty and graduate students judged the acquisition of competent faculty as the most important criterion for assessing the effectiveness of academic departments. Among the other important criteria were a positive learning climate, joint planning, acquisition of financial resources and high faculty morale. Involving students in goal setting and decision making received lower ratings. The departments were viewed as being generally effective and were given high ratings on criteria such as acquiring competent faculty, a positive learning climate, high research productivity and high expectations for student performance. Problems associated with financial restraint were identified as inhibiters of effectiveness. Within the context of these general results, there were variations across the four categories of respondents and across disciplines.

Temporary Systems

Two studies (Hopkirk, 1977; D. G. Young, 1979) focused specifically on temporary organizations or structures such as task forces and committees.

In the first of these, Hopkirk (1977) examined five task forces in order to assess their actual and potential utility as an organizational arrangement in education. The characteristics of these task forces were generally consistent with those of temporary systems as these are described in the literature. Members of the task forces tended to feel that this was the optimal organizational form for achieving their goals. A well-planned task force appeared to be effective for accomplishing developmental tasks, solving non-routine problems, managing organizational change and enhancing professional growth.

D. G. Young (1979) explored the relationships between certain characteristics of university committees viewed as temporary systems and their effectiveness. Overall effectiveness of the committees was associated with effective linkages, processes and implementation. Effective linkages involved high levels of communication with the organization; effective processes included low task complexity, highly defined procedures and high involvement. Effective implementation involved assessing the feasibility of recommendations as well as assessing the extent of change required and the receptivity of the parent organization.

Teaching/Learning Processes

Research into what is sometimes termed the primary production process in organizations is a relatively recent development among the doctoral theses reviewed. Studies have investigated teaching/learning processes at three major levels: organization, teacher and learner. The conceptual bases and research strategies differ both within and across these three levels.

Organizational Perspective

The main focus of a study conducted by Stryde (1973) was to conceptualize the teaching/learning process at the classroom level and to develop an instrument to measure various dimensions of the process. A conceptual framework derived from systems theory, organization theory and concepts of the teaching-learning process served to guide the development of the instrument. The final form of the questionnaire consisted of three scales defined as Locus of Decision, Change in Practice over Time, and Uniformity of Practice. Analysis of data revealed that there were variations in the teaching-learning process across grade levels and also across subject areas.

Gelinas (1978) carried out a primarily conceptual study grounded in general systems theory for the purpose of developing a model for the functional integration of special education into regular education. The general approach was deductive and oriented toward desegregation-integration. A planning strategy for the implementation of the model was also proposed. An analysis of the provisions for special education in Sweden, Holland, France and Quebec revealed that none of these had achieved as high a degree of integration as in the proposed model. However, there were few discrepancies evident in the goal analysis, and some of the systems had potential elements for further steps toward integration.

Teaching Processes

Studies of teaching processes have focused on the basis of teacher decisions and on clinical teaching.

The characteristics and concomitants of decisions formulated by teachers while they are interacting with students were examined by Wodlinger (1980). Generalizations developed from the case study indicated that teachers tend to formulate many decisions, that decisions tend to be instance specific, that the information teachers used was derived from observations of overt behavior and that feedback was not actively sought. Teachers seem to devise ways to cope with indefinite or uncertain information in formulating decisions.

On a related topic, Mireau (1980) studied a teacher's perceptions of students in order to explore possible reasons for differential treatment of students. A detailed examination of interaction profiles for a class of grade three students revealed that differential treatment was provided for each child on the basis of the teacher's assessment of the relative strengths and weaknesses of the student. The amount and type of teacher-student interaction in relation to different expectancy groups was not consistent across subject areas.

Smyk (1987) conducted a case study in order to develop knowledge and understanding of clinical teaching in a diploma nursing program. Participant observation and interviews revealed that the majority of nursing instructors' interactions focused on the nursing student rather than on patients. However, the nature of the interactions was influenced by the presence of the patient which contributed to the stress of nursing students. Questioning was the teaching technique preferred by nursing instructors as a way to develop the students' decision making and problem solving skills. Discussion was used less frequently than were providing information, active participation by the instructor or supervised practice. In general, clinical teaching was the operationalization of nursing theory developed in a classroom context; classroom teaching and clinical teaching were complementary components of the nursing program.

Learning Processes

The analysis of teaching/learning processes focused primarily on the learner has taken several forms. Initially the studies were based in research on teaching and conducted from an objectivist stance. Two subsequent studies, each of which involved teacher education students, shifted to an interpretive strategy.

King (1979) studied student behaviors during the learning of mathematics in order to gain insights into conceptions of self-performance and teacher expectancy effects. Results of the data analysis suggested that students were mainly on-task and reported self-oriented thoughts more frequently than subject matter-oriented thoughts. Tentative relationships were established among and between the students' conception of self-performance, their causal perceptions of success and failure, their achievement-related behavior, the teacher's causal perceptions of students' performance, the teacher's performance expectations of students and the teacher's behavior toward the students.

In a related study, Smyth (1979) analyzed how pupils used learning time, the settings in which learning occurred and the associated teacher behaviors for four grade six pupils. Because of the structured approach of the teacher, there was little variability in time allocated to various classroom pursuits. Meaningfulness of time spent on assigned learning tasks varied noticeably. There were few differences in teaching behaviors received or in the settings in which this occurred. Available learning settings were at least partially pre-determined by the size of the class, the physical limitations of the size of the room and its peculiar acoustical properties.

An intensive examination of the behavior of eleven student teachers in elementary school physical education classes was conducted by Campbell (1982). The seventy-seven variables that had some influence on their behavior could be placed into nine categories including (a) planning, management and organization, (b) teacher's experiences, (c) pupil response/behavior, and (d) environment. The researcher concluded that student teachers are conscious of the decisions they make, that teacher behavior is a complex phenomenon, that a workable category of sources of influence can be developed and that more than one variable influences a single observed behavior.

Three questions that guided MacKinnon's (1987) interpretive study of students in a teacher education program focused on the meaning of their classroom experience, the meaning of the practicum experience and the relationship between the two experiences. As expected, the interpretations of these experiences and the nature of socialization varied across students; however, there were some commonalties. Students expected that coursework in Education should provide them with practical knowledge about how to teach. Success in coursework was important to the student teachers. Similarly, success in the practicum was defined as being crucial to their future as teachers. Consistent with this definition of the situation, they attempted to perform in accordance with expectations held for them and to present themselves favorably to cooperating teachers and faculty consultants. Although teacher candidates did not abandon entirely the orientations espoused in coursework, they did note the discrepancies between theory and practice.

Relationships Among Organizations

Relationships among organizations emerged as a major theme in research on organizations beginning in the latter part of the 1970s. The studies fall into two major categories: those that deal with interorganizational relationships at a fairly general level, and those that focus specifically on the nature and effectiveness of linkages between organizations.

Interorganizational Relationships

The general nature of relationships between specific organizations was examined in two cases studies. In the first of these Falk (1983) analyzed the nature of interorganizational relationships between a clinic that provided support for children with severe learning difficulties and a number of schools. The dynamics of relationships between a city and two school jurisdictions regarding the provision of recreational and educational services were the focus of Habinski's (1987) case study.

Of specific interest to Falk (1983) was the effectiveness of the clinical delivery system. In part, results indicated that school personnel were aware of the service but that parents and new teachers required more information. School personnel were generally satisfied with the nature of communication between the clinic and the school but felt that contacts with parents could have been improved. The overall effectiveness of the service was assessed positively. A number of inferences were extrapolated from the data. Three related specifically to effectiveness: effectiveness may be enhanced by a change in delivery system when there is environmental pressure, effectiveness requires cooperation on the part of those served and language used may impede communication.

The study by Habinski (1987) was conducted within a conceptual framework grounded in a systems perspective. Metasystem was the concept applied to the controlling or regulatory system governing public use of various facilities. The period between 1970 and 1980 was characterized by changing societal values supportive of decentralized decision making and responsiveness to local needs. An examination of three conflicts revealed that the school boards consistently defended the interest of educating children and maintaining control over their responsibilities. Although forces from the environment threatened to erode the authority of the school boards, they were able to withstand the pressure. The goals of the metasystem remained secondary to the respective goals of the individual organizations.

Interorganizational Linkages

The formalization of linkages has been one aspect of interorganizational relationships investigated in a series of studies involving similar conceptual bases and methodologies. In the first of these studies, M. B. Andrews (1978) investigated linkages between colleges and hospitals in relation to different components of a respiratory technology training program. Subsequent studies investigated the nature and effectiveness of linkages between colleges and other organizations (Weinhauer, 1979), between a medical training center and eight hospital departments in Kenya (Mutema, 1981), between secondary schools and other organizations in relation to work experience programs (Germscheid, 1982), between a university and industry in relation to a faculty of engineering cooperative education program (Mann, 1982), between federal and territorial agencies in the implementation of a workforce training program (Gessesse, 1988), and between a teachers' association and forty-four organizations (J. H. Jeffrey, 1989). In the most recent investigation Brownlee (1990) studied interorganizational linkages between provincial educational organizations.

A generalizing analysis based on data collected for four programs by M. B. Andrews (1978) suggested that the key variables determining the nature of the linkages was the degree of relative resource commitment and symmetry of the resource exchange. Results of the study supported high formalization, standardization and relative resource commitment when student achievement is used as the effectiveness criterion.

The colleges in Weinhauer's (1979) study had varying degrees of linkages with external organizations. The activities in three types of colleges -- independent, denominational and affiliated -- were similar. However, there were some differences in frequency of such activities, budget allocation for the activities, awareness and perceived effectiveness. Enrollment increases appeared to be associated with formalized linkages and environmental relations activities. Type of environmental relations activities was related to the extent to which there were formalized linkages.

Mutema (1981) found that the degrees of formalization and standardization of linkages between a medical training center and hospital departments were low while the degrees of intensity and reciprocity varied. Voluntary interactions were characterized by informal agreements, low procedural standardization, and varying degrees of intensity and reciprocity. The impact of linkage dimensions on the effectiveness of clinical practice could not be established; effectiveness in all hospitals was rated as "fair." Similarly, Germscheid (1982) found that linkages between schools and other organizations in relation to work experience programs were characterized by low formalization, low intensity, low reciprocity and low resource commitment. Frequency of interaction, resource exchange agreements and contributions to program integration were highly interrelated. The researcher proposed a series of propositions about cooperative programs based on positive relationships revealed by the analysis.

Findings of Mann's (1982) study on linkages between a university and industry lend some support to the hypothesis that the effectiveness of an inter-agency network can be predicted from structural dimensions and situational factors such as resource dependence, inter-unit awareness, formalization of inter-unit relationships and inter-unit influence. For some participants in the program, perceived effectiveness was not contingent upon the achievement of high priority objectives.

Gessesse (1988) found that the dimensions of linkages between federal and territorial agencies included formalization, intensity, reciprocity and standardization. Results of the analysis revealed there were strong and effective relationships between agencies. Members of the organizations perceived each other positively, exchanged information and resources, had minimal disagreements and were satisfied with established procedures. Formalized agreements appear likely to lead to greater resource exchange activities which, in turn, are likely to lead to effective program implementation.

In a study of the Alberta Teachers' Association, J. H. Jeffrey (1989) focused on the nature and effectiveness of linkages with organizations classified as business concerns, mutual benefit associations, commonweal organizations and service organizations. Results generally indicated a positive relationship between various linkage variables -- such as consensus, ease of communication and extent of conflict resolution -- and effectiveness. The effectiveness of relationships also depended on the interpersonal relationships between the particular individuals involved. There were numerous differences in relationships across the four types of organizations as well as in variables associated with degrees of effectiveness. The researcher concluded that generalizations regarding interorganizational relationships which do not take into account the specific type of organization involved may have limited validity.

The type of organization also proved to be significant in Brownlee's (1990) study of relationships between the Alberta Department of Education and five provincial organizations. Additional dimensions were added to the conceptualization that guided the study in order to reflect adequately the presence and nature of political activities, desire for autonomy, public awareness and boundary spanning activities. Boundary spanning activities were dispersed, and a high degree of interorganizational awareness was due to the extent of personal acquaintanceships. In general, relationships were weak but considered to be effective; stronger linkages were resisted because of possible reduction in autonomy. Political factors were significant in that organizations were motivated to enter into relationships with Alberta Education to compete for public favor, protect their domains, control their environments and enhance the interests of members.

Summary

Research into the various organizations that are of interest to students of educational administration has progressed along a number of different themes. These themes relate to describing organizations, analyzing structural characteristics, investigating relationships between structural and other variables, examining teaching/learning processes and exploring interorganizational relationships. The initial studies in most of these themes were conducted in the mid-1960s; however, research into teaching/learning processes and interorganizational relationships was introduced much more recently. Research within particular themes and across themes reflects changing research interests. For example, an early interest in case studies of the development of organizations was supplanted by research into structural characteristics. Within that line of research, studies based on the bureaucratic model gave way to the Aston approach. Interest in teaching/learning processes was more evident in the late 1970s than at any other time. Research on interorganizational relationships remained prominent into the latter part of the 1980s. Another feature of the more recent research is evidence of a resurgence of interest in case studies, particularly from an interpretive perspective.

An implicit, if not explicit, question underlying the studies that have been reviewed concerns the extent to which conceptual and methodological approaches from the general field of organizational analysis are applicable to organizations of interest in the study of educational administration. In general, the results of the research confirm that a broad range of concepts grounded in organization theory may be brought to bear on the analysis of educational organizations. The variety of characteristics and relationships that have been investigated, together with the variety of organizations to which they have been applied, preclude any broad generalizations even within particular themes. While past research has been successful in identifying general characteristics of educational organizations, little of the distinctive quality of these organizations has been revealed by the analyses.

6

Individual and Organization

Research themes developed in this chapter relate closely to those presented under the organizational analysis title. The general themes and specific studies included reflect a common interest in members of an organization or in relationships between members and the organization viewed as a separate entity. Although some themes could have been presented as an aspect of organizational analysis, they have been included here because of that particular implicit if not explicit orientation. The sixty-five studies are reviewed under seven themes: group and individual characteristics, organizational membership, organizational climate, socialization, career development, satisfaction, stress and sources of support.

Group and Individual Characteristics

Research into the characteristics of organization members has focused on attitudes, on personality variables and on role orientations of both teachers and administrators. The conceptual bases for these studies are drawn primarily from the disciplines of psychology and sociology. Although relationships were investigated in some of the studies, the major outcomes have generally been of a descriptive nature.

Personality and Attitudes

The initial study in this general area by Von Fange (1961) investigated patterns of personality among education students, teachers and school administrators. Subsequently, Ratsoy (1965) examined differences in the attitudes of students in a four-year teacher education program while MacNeil (1991) investigated life roles and values of senior undergraduate students. Related studies included an exploration of personality variables in relation to teachers (Milne, 1969; Naylor, 1971) and staff in correctional institutions (Alward, 1982).

The measurable patterns of personality on the Myers-Briggs Type Indicator of the samples of education students, teachers and school administrators in the Von Fange (1961) study all were significantly different from the distribution of personality types found in the general population. Modal types were identified, and a large proportion of teachers fell into relatively few types. Statistically significant differences were found among categories of grade level, subject specialization and satisfaction levels. The researcher concluded that the theory of increasing selectivity required modification to allow for greater heterogeneity of personality preference-type distributions among educators.

Ratsoy (1965) found significant differences among teacher education students across the four years of a program on measures yielded by the Omnibus Personality Inventory. Student teachers completing alternate programs also differed in attitudes. Additional analysis indicated that differences in attitudes were related to the sex of respondent, subject matter field concentration, and education position aspiration. However, a subsequent study by Naylor (1971), based in part on the same data, into the relationship of demographic and personality variables to actual positional promotion indicated that the greatest differences were between male and female teachers. The researcher concluded that this difference must be taken into account in such studies to avoid spurious findings. Comparisons among categories of personnel such as teachers, coordinators and principals did not reveal any differentiation on personality variables.

In a study of the work values and life roles of undergraduate education students, MacNeil (1990) found that the participants tended to value personal achievement and social orientation more than they valued working conditions and risk taking. Among the five major life roles -- studying, working, community service, home and family, and leisure -- working along with home and family were important for most students. Community service was the least important of life roles. Leisure and work life roles were associated with values participants would seek in future. Relationships explored suggested a tendency toward conformity rather than creativity among the participants. A measure of uncertainty was associated with the likelihood of pursuing a career in teaching and the permanence of such a career. Fewer than half of the 157 participants expected to obtain full-time employment as a teacher while about one third expected to pursue careers in other fields.

None of the hypothesized relationships between professional orientation, mobility and the strengths of selected needs -- as measured by the Edwards Personal Preference Schedule -- of elementary teachers were supported in a study by Milne (1969). Results of the data analysis indicated that teachers had low achievement motivation and that they were lower than the adult population on needs for Nurturance and Endurance. However, Need Achievement and Endurance were higher among teachers whose professional orientation was also high.

The Alward (1982) study explored the potential for conflict between two groups of staff in correctional institutions -- security and treatment personnel -- in relation to varying personal and professional characteristics. There were some differences between the groups; for example, treatment personnel had higher education and longer service than did security staff. However, there were few differences in psychological needs, as measured by the Edwards Personal Preference Schedule and few changes in needs with increased service. Any differences in orientations were predictable and compatible with roles. The researcher concluded that the potential for conflict was superficial and had only limited possibility for any dysfunctional consequences.

Professional Orientations

Analysis of a particular set of attitudes, professional role orientations, has entered into a number of studies of teachers. The conceptual basis for this research and the instruments are based in definitions of professionalism that include dimensions such as beliefs about knowledge, service, relationships with colleagues and autonomy. The professional role orientation of educators and relationships among the dimensions of professionalism, patterns of role orientation, position in school organizations and various personal-professional characteristics were investigated by Hrynyk (1966) through a survey of Alberta teachers. In a study that was focused at the school level, Scharf (1967) attempted to determine if the values associated with professionalism formed the "in group" or dominant values of teacher groups. The processes through which professionalism develops in physicians and surgeons was explored by Lyall (1991).

A general conclusion supported by the results of the data analysis in Hrynyk's (1966) study was that the different groups of teachers exhibited wide variations in the patterning of professional role orientations. The orientations towards the five dimensions of professionalism were related to a number of background variables. Various subgroups appeared to have progressed to different points on the professionalism continuum. School administrators were generally more positively oriented than were other groups on most dimensions of professional role orientation. On the basis of a survey conducted in twenty-five schools Scharf (1967) concluded that the values associated with professionalism did not form the dominant values of teacher groups. Values, attitudes and opinions were not integrated into the norms of teacher groups; nor were work and social subgroups founded around professional role orientation types. Nevertheless, exchange theory did form an appropriate model for studying the social structure of teacher groups.

A profession-wide perspective was involved in the study by Bride (1973) into the prestige hierarchies evident among Alberta teachers in terms of selected personal, positional and professional characteristics. Attitudinal differences, defined by professional role orientations, among members of different prestige groups were also examined. The attitudes of high and low prestige groups, or of groups experiencing either status congruence or incongruence, did not differ appreciably. Clear prestige differences were observed on positional characteristics, the highest of which were a number of principal positions. On the basis of personal-professional characteristics, highest prestige was accorded senior high school teachers with eleven to twenty years of experience, six or more years of teacher preparation and a record of professional association service.

Lyall's (1991) study into the development of professionalism focused on the socialized beliefs and values that guide the actions of physicians and surgeons. A series of propositions was developed about how the Alberta College of Physicians and Surgeons as well as other factors shape personal policies or tacit theories. The greatest influence on personal policies relating to professional conduct occurs during introduction to professional practice. Among the factors that influence the development of a sense of professionalism are teachers and peers, learning during formative years, changing lifestyle options and perceived loss of public respect. The researcher concluded that professional conduct is an evolving concept which extends beyond the intellectual and practical domains to a way of living. Ethical dilemmas originate in the system of remuneration, advances in medical technology and fears of litigation. These and other factors exert strains on the doctors' tacit theories and are a source of resentment within the profession.

Organizational Membership

The nature and consequences of membership in organizations such as professional associations and colleges have been explored both directly and indirectly. Studies that were conducted in this general area focused on the involvement of members in organizations, students as members of schools viewed from an organizational perspective and students in postsecondary institutions.

Member Involvement

Three studies have dealt with the general nature of participation by members in an organization. Ingram (1965) studied the extent of member participation in and commitment to the Alberta Teachers' Association as well as the relationship between participation, commitment and various member characteristics. In a study of the dynamics of student organizations, MacLeod (1971) tested hypothesized relationships between membership in power and influence structures in students' unions and each of membership on the executive, social class, attitudes toward the political process, perceptions of power and student values. The nature of the relationship between individual and organization was explored by D. H. Allan (1978) conceptually and then was tested empirically in a college.

Ingram (1965) found that the level of member participation and commitment appeared to exceed the expectations of both the officers and the rank-and-file members of the teachers' association. Commitment of members exceeded expectations to a greater extent than did participation. The relationship between commitment and participation was positive but not strong. Results of the data analysis also indicated that selected personal and professional characteristics such as sex, teaching position, teaching experience and teacher education were related to involvement, particularly to commitment.

The results of the MacLeod (1971) study conducted in two high schools supported the conclusion that student leaders, who were also the designated office holders, were not representative of the total membership in terms of social class. However, the values that they held were representative of the membership as a whole. The students in the schools generally did not feel that they had much influence on decisions made by the students' union. Students who were not members of power and influence structures held less favorable attitudes toward political processes in the union than did those who were involved in the structures.

In the model developed by D. H. Allan (1978) organizational members were categorized in terms of the resources to which they had access and their relationships with the leader. These categories were termed dependent, interdependent and independent. When the model was tested in a college, all three groups could be identified, and the predicted variations in relationships were evident. Dependents were in an integrative relationship with the leader, interdependents were in an exchange relationship and independents were in a threat relationship. The researcher reported that variations in resources to which members had access were less evident.

A highly specific aspect of the individual-organization relationship, parenting hospitalized children, was explored by Park (1991) using a grounded theory approach. The general conclusion drawn from the study was that the experiences of parents whose children are hospitalized follows a common pattern that could be described in terms of a stage theory. In the first stage, "losing control," which occurs prior to hospitalization, the parent notices changes in the child and seeks help from a physician. During the "relinquishing of responsibility" stage parents let the hospital staff assume care. Recognition of the inadequacies of the quality of care leads either to becoming liberated or resigned to the situation. Liberated parents recognize their potential, rely increasingly on their own resources and assume responsibility for the care. In contrast, parents who are resigned to the situation repress their frustrations and are angry for not taking more control during hospitalization.

Students and School

Research into the relationship between students and schools has assessed the significance of values and attitudes of both students and teachers as well as the nature of school experiences.

Through a survey conducted in ten high schools, Peach (1970) investigated relationships between differences in student and teacher expectations for achievement and student attitudes about certain aspects of education, their associates and the world of work. Achievement expectations of teachers were not different across groups based on various personal, professional and school characteristics. Differences in the achievement expectations of students were related to school size, location, grade and social class, and level of occupational aspiration. The pattern of data on respondents pointed to the essential conservatism and idealism of high school adolescents; the values of the students studied appeared to parallel those of the adult culture.

In another study that involved high school students, Bevan (1970) examined the need for independence of students and the relationships of this variable to student satisfaction, classroom and school climate, and selected student characteristics. The students who were studied perceived themselves as having very limited control over classroom situations and expressed a desire for more control over decision making. The researcher concluded that the need for independence was not being fulfilled for the majority of students. There seemed to be a particular need for students to participate more fully in choosing individual classroom learning activities.

The results of a subsequent study by MacMillan (1973) suggested that the prospects for greater involvement by students in decision making may be moderated by both school and teacher characteristics. More specifically, the study explored the question of how a teacher's reaction to school authority structure is reflected in the control orientation toward students. Results of a survey in forty-four elementary schools indicated that teachers in high status obeisance schools were more custodial toward students than those in low obeisance schools. Rural and town teachers were more custodial than suburban teachers; some differences in control orientations were also noted across districts.

The degree of success in school could be viewed as an important indicator of the nature of student-school relationships. T. S. Sullivan (1987) attempted to identify variables that were related to the retention of students in high school in one school district by comparing characteristics of graduates with dropouts. Results of the study indicated that graduate and dropout groups differed in terms of education level of mother, parental participation in parent-teacher meetings and nature of parent-student relationships. Graduates and dropouts differed in school experiences. The graduates had a consistent experience of success while the dropouts had a series of experiences that resulted in the decision to leave school. Graduating or dropping out appears to be the culmination of a process in which home, school and environmental influences interact in a unique way for each student.

Postsecondary Students

Although the nature of the relationship between students in colleges or universities may be similar to those at other levels of educational systems, there are also some important differences. These are reflected in the ways in which both the individual and the organization perceive the relationship. For example, the organization may provide particular services while students experience sources of pressure different from those in high school.

The provisions for student services in nine community colleges in terms of specific functions were investigated by Hendry (1974). Across all colleges, the student counselling and student registration services were perceived as broadest in scope while educational testing and social regulation functions were most limited. Student counselling and pre-entrance information services were perceived as being of highest quality while greatest need for improvement was in areas such as student induction, career information and student placement.

D. E. Chapman (1986) conducted an interpretive study of the lives of eight mature-age undergraduate university students and their spouses. The purpose of the study was to describe the nature of the lives of the participants from their perspectives. Participants were involved in data collection methods, primarily interviews and journal keeping, that prompted them to describe and interpret their lived experience. Themes in the resulting descriptions included student family histories, influences of the university and family settings, spousal relationships, family adjustments, relationships with professors and students and relationships with institutional structures. The researcher observed that students had numerous qualities of "outsiders" in relation to how they pursued a university education. Other aspects of the situation that the researcher felt warranted mention included the merging of family/university settings as the context for their lives, the relative poverty of university life, the feelings of guilt associated with being students, the social contract between spouses and the changing attitudes toward university.

A specific aspect of the relationship between student and organization, namely, the factors associated with success and satisfaction in transferring from college to university was explored by Vaala (1988). Although students tended to be more satisfied with the college than with the university portions of their programs, factors such as acceptance of college credits enhanced the level of satisfaction with the transfer. Students who had friends already registered at university and who had visited the campus tended to have more successful experiences. Those students who expressed a stronger preference for a transfer program tended to experience greater success at university. The support systems on which students tended to rely differed between the two institutions. Results suggested actions by both faculty and administrators that could enhance the levels of satisfaction and success.

Organizational Climate

The concept of organizational climate is indicative of the nature of the context in which individuals work as well as of the general nature of the relationships between members and an organization. Studies in this area have tended to be relational surveys involving instruments such as the Organizational Climate Description Questionnaire which define climate in terms of a number of different dimensions or concepts such as "open" and "closed." In relational studies, climate has been treated, either implicitly or explicitly, as both the dependent and the independent variable.

In the first of two studies that tended to treat climate as a dependent variable, Lupini (1965) investigated the extent to which principals' and teachers' values are related to social and administrative interaction in the school. Subsequently, Dyck (1978) examined the relationship of organizational and group characteristics to perceptions of organizational climate in university schools of nursing.

Results of the Lupini (1965) study indicated that agreement between the values of the principal and the values of the staff was related to social behavior. In particular, there were differences in descriptions of principal behavior in schools where value congruence was high and those in which it was low. The values of staff members were consistently related to certain climate characteristics. Traditional values were associated with climates described as "closed" while emergent values were associated with more "open" climates. Results of Dyck's (1978) study supported three major conclusions: (a) group and organizational characteristics were related to climate, (b) position in the organization was related to perception of climate, and (c) group and organizational characteristics were more closely associated with perceptions of climate on some dimensions than on others. The most significant factors influencing perception of climate were rank, hierarchy, experience at present faculty, experience in nursing, age of member and tenure.

Two other studies tended to treat climate more as an independent variable. In the first, Harvey (1965) examined the relationship between the organizational climate of a school and the classroom behavior of teachers. The second focused on the relationship between organizational climate and administrative behavior (Batchler, 1977).

The results of the analysis of data from forty schools in the Harvey (1965) study did not support the hypothesized relationship between school climate and teacher behavior in general; however, there were some significant correlations between specific aspects of teacher behavior and specific aspects of climate characteristics. A principal's influence on climate seemed to increase with length of service in the school. In Batchler's (1977) experimental study, climate was manipulated by means of information given while responses to in-basket items were used to measure administrative behavior. Climate was defined in terms of two dichotomies: (a) innovation and initiative versus adherence to rules and precedent, and (b) permissive supervision versus close supervision. The results indicated some differences in behavior in different climates; for example, the number of problems attempted was highest in a permissive supervision climate and lowest in a close supervision climate. Subjects in climates with incompatible characteristics tended to be more analytical, to organize work and to make more final plans than did those in less ambiguous climates.

Clarification of a concept similar to climate, faculty vitality, which has emerged in the literature on higher education was the major objective of a study by Nicolson (1988). The perceptions of faculty members in ten colleges served as the basis for identifying the dimensions of faculty vitality as well as the factors that enhance or detract from the vitality of faculty members. Although vitality was investigated as an attribute of individuals, the concept has also been extended to institutional vitality which, presumably, is a composite of the vitality of faculty. Vitality is the ability of faculty members to harmonize their individual goals with those of the organization. The major dimensions of vitality are attachment and commitment to the organization, professional effectiveness, positive self-motivation, seeking challenge and self-actualization. Among the factors that were perceived to affect vitality are organizational climate, external environment, working conditions and academic status.

Socialization

Socialization refers to the process through which neophyte members of an organization become familiar with and come to accept organizational values, norms and operational procedures. Most of the studies on this topic have involved teachers or prospective teachers. The dominant research strategy was that of a case study but survey methods were also used.

In one of the first studies, Bird (1982) used an ethnographic approach to describe the socialization process experienced by a person who was seconded from a school to work in the practicum component of a university-based teacher education program. Tardif (1984) conducted a study designed to result in a description and interpretation of the process of becoming a teacher from the perspective of prospective teachers with particular reference to the practicum. A specific aspect of the socialization process, namely, mentoring was studied by Carruthers (1986) in relation to the induction of beginning teachers. The purpose of a study by McGuire (1988) was to examine the transitional experiences of faculty members as they adapted to the role requirements of a distance education university. In the most recent study, G. N. Pickard (1989) explored the professional socialization of five beginning teachers through a multi-case study.

The purpose of the study by Bird (1982) was to explain the elements of the daily activities of one practicum associate. On the basis of the data analysis, a number of propositions were advanced. These propositions focused, among other areas, on the philosophical and practical implications of secondment, on the socialization process, on the optimal utilization of skills, on working knowledge of a complex network of interrelationships and on recognizing the limitations that a person brings to a position. Specifically, one proposition suggests that some thought might be given to the initial process of socialization whenever a neophyte enters a totally new and well-established organizational environment.

A variety of field research techniques was used by Tardif (1984) to obtain data about four key participants over an eighteen-month period. A set of general perspectives common to all four participants in response to situational pressures of the practicum emerged, even though each student teacher's experiences were unique. Through the practicum a perspective on "self as teacher" was developed and modified. The experience also helped the participants to develop a patterned way of thinking and acting in adopting classroom behaviors of teachers. Results of the study prompted the researcher to reflect on ways through which prospective teachers might be helped to become more critically aware of their beliefs about teaching rather than merely being socialized into existing patterns.

Carruthers (1986) defined mentoring as a relationship that involves mutual trust, respect and liking. The mentor is a person perceived to hold similar values who serves as a role model. In general, the beginning teachers in the study indicated that they had a mentoring relationship with another person in terms of this definition. The extent to which teachers faced adjustment problems, and presumably needed mentoring, varied with categories of respondents. For example, first- and second-year teachers seemed to have more problems than interns. In regard to these problems, beginning teachers looked most often to fellow teachers for help but also to superintendents. Mentor associations were valued highly by beginning teachers, particularly in the first year of teaching.

A specific focus for the G. N. Pickard (1989) study was the expectations that the beginning teachers had for the teaching profession and the extent to which they were fulfilled. Although each person's experiences were unique, some common themes emerged in relation to their expectations. In particular, they expected to experience a feeling of belonging, to gain recognition, to experience positive interpersonal relationships and to receive information relevant to their responsibilities as well as on their performance. The preceding expectations, which identify various types of support, were fulfilled only partially and not continuously. In response to the press of organizational cultures, the teachers modified both their expectations and the images of themselves as teachers. The researcher concluded that there is need for greater understanding by those in preservice preparation programs and school administrators of the process of becoming a teacher.

An ethnographic approach, involving primarily interview data from six key informants supplemented by observations and by the analysis of documents, was used by McGuire (1988) to study the socialization process in a distance education university. The organizational tasks and environment encountered by new faculty members differed from their previous experience, requiring them to adopt new responses and coping strategies. The challenge to individuals was complicated by change within the organization that accentuated the stressfulness of the socialization process. The researcher concluded that organizational socialization is a multiple transition process requiring adjustments in a number of interactive areas of life. Most of the participants had not achieved a "comfortable fit" after two to four years in the organization.

Career Development

The development of a career may be thought of as a process of socialization to a particular profession. Career development is usually characterized as progressing in stages. Although qualitative methods of data collection appear to be predominant, survey strategies have also been used. Three of the four studies conducted in this area relate specifically to women, two to nurses and the other one to educators.

Developmental patterns of teaching careers were explored by L. T. Williams (1986) through interviews with twenty-seven teachers. Although there were the anticipated variations, the researcher concluded that the data supported conceptualizing career development in terms of five stages: surviving, consolidating learnings, expansion and growth, disillusionment, and finally a holding or lifelong learning stage. At each stage, teachers may exit from the career line. The development of a career involves numerous specific changes in areas such as conceptions of the role, view of discipline, nature of planning, self-assessment of performance and sources of support. The researcher concluded that because teachers identified administrators as sources of support, supervisors could provide guidance to teachers and facilitate progress through the stages toward a lifelong learning pattern.

The purpose of a study by Larsen (1984) was to describe the career development of female nurses who held doctoral degrees. Data were collected primarily through unstructured interviews with ten participants who were professors in faculties of nursing at the time of the study. The major conclusion was that the process of forming a career was a complex, individualized and changing series of psychosocial conditions extending from early to middle adulthood. The life structure progressed through alternating periods of stability and change that were qualitatively different and age-linked. A special developmental time occurred during the mid- to late thirties. For the participants, their careers were prominent and meaningful aspects of their lives. The unique character of adult development for the women in the study confirms the need to revise theories that are based primarily on the life experiences of men.

A study by McLees (1988) also focused on the development of career orientation of nurses as influenced by life events, family responsibilities, education, work history and professional and community involvement. An additional purpose was to develop an instrument for identifying career orientations in a way that might be useful for counselling purposes. Analysis of survey data revealed eight career orientations: ambition for leadership, job security, family commitment, independence, variety/adventure, altruism, self-esteem and professional integrity. Different career patterns were identified and labelled stationary place-bound, mobile lateral, advancing place-bound, mobile reverting and mobile advancing. Nurses who were no longer in nursing tended to leave for reasons such as dissatisfaction because of stress and frustration with working conditions, family commitments or health problems. Greater freedom to express their creativity and individuality were mentioned by respondents who had developed careers in other professions.

B. Young (1989) used a life-story interview approach to describe the career development of four women educators who held doctorates in educational administration. Three major themes -- chance, choice, careers -- provided a framework for presenting anecdotes about the lives of the four women. Although the specifics differed, chance events had a significant impact on careers. Each of these chance events served as an opportunity for making choices. Five elements that emerged as significant dimensions of the lives of the four women were career preparation, opportunities available in society, the influence of marriage, pregnancy and child care, timing and age. Results of the study provided the researcher with a basis for suggesting the redefinition of key concepts such as opportunity, career and success to describe more adequately the life experiences of women.

Satisfaction

Measures of satisfaction have been used in various ways in different studies. In some instances, satisfaction is viewed as a characteristic that merits attention in its own right while in others it is treated as an indicator of effectiveness. A number of studies have focused specifically on the job satisfaction of administrators.

Sources and Levels of Satisfaction

Facets and sources of satisfaction have been analyzed specifically in two descriptive surveys. Rice (1978) investigated the job attitudes of a random sample of principals in Alberta while Onuoha (1980) studied the job facets and aspects that contributed to the job satisfaction of educators in rehabilitation medicine in terms of Herzberg's two-factor theory.

The principals in Rice's (1978) study were moderately satisfied with the job, but higher level needs were satisfied to a lesser degree than were the lower level needs. Major sources of satisfaction included relationships with teachers, responsibility and autonomy; major sources of dissatisfaction included administration and policies, societal attitudes, routine work and the workload. Results of the study suggested that job satisfaction is contingent upon different combinations of individual and work variables. The greatest sources of satisfaction on the job for rehabilitation medicine educators were essentially factors intrinsic to the work while dissatisfaction was related mainly to factors extrinsic to the work (Onuoha, 1980). Critical incidents in the area of satisfaction focused on recognition, achievement, varied and challenging work, and good interpersonal relations with students. Critical incidents in the dissatisfaction area were related to working conditions, unfavorable policies and poor interpersonal relationships. The data also revealed differences in overall satisfaction between groups.

Satisfaction has been a major variable in a number of relational studies. The preference for different forms of communication and satisfaction with communication was investigated by Bacon (1971) in five postsecondary institutions. Hellyer (1974) studied the levels of satisfaction of students, parents and teachers in four high schools. The relationship between job satisfaction of beginning teachers, involvement in decision making and supervision experienced were investigated by Hewitson (1975). Relationships among job satisfaction, job performance and role ambiguity of teacher interns were the focus of a study by Nhundu (1987).

The results of Bacon's (1971) study indicated that satisfaction with communication was positively related to role satisfaction for all groups: presidents, staff members and students. In general, all groups preferred individual contacts over group contacts, oral contacts over written contacts, self-initiated communication over other-initiated and informal contacts over formal ones.

Students, parents and teachers in four high schools held different perceptions of the school as a satisfying educational experience for students (Hellyer, 1974). Teachers perceived schools more favorably than did students or parents. Community support appeared to be an important factor in teacher morale. The general profile of high morale teachers was characterized by long-time, active residence in the community, nearing retirement and economic security. The high satisfaction students tended to be active in school and community life.

Findings in the Hewitson (1975) study showed that high levels of involvement in decision making by beginning teachers were associated with professional satisfaction but not with teaching as a career. The latter was more closely associated with the success of the principal in building and maintaining rapport. Very few beginning teachers expressed a preference for either less involvement in decision making or less frequent supervision than they had experienced. Among the variables introduced into the analysis in the Nhundu (1987) study of job satisfaction, job performance and role ambiguity of teacher interns were performance appraisals by both supervisors and the interns themselves. Job satisfaction was negatively associated with role ambiguity and positively with both self-appraisals and performance ratings. Supervisors tended to rate performance more favorably than was indicated by self-appraisals. The results suggested a number of ways in which job satisfaction of teacher interns might be enhanced.

Satisfaction and Effectiveness

Two broad areas of interest -- job satisfaction of principals and perceived school effectiveness -- were the focus of attention in three studies. The primary purpose of Gunn's (1984) research was to examine the relationship of job satisfaction of senior high school principals to perceived school effectiveness, leader effectiveness and level of influence. Subsequently, N. A. Johnson (1988) investigated relationships among job satisfaction of principals, perceived organizational effectiveness and leader effectiveness. In a related study, Sroypan (1988) examined the relationship of job satisfaction of junior high school principals to their perceptions of personal and school effectiveness.

Results of the analysis in Gunn's (1984) study indicated that there was a direct relationship among the major variables. Similarly, Sroypan's (1988) study confirmed that job satisfaction of junior high school principals was directly related to their perceptions of personal and school effectiveness. In contrast, results of the questionnaire survey in elementary schools did not support a systematic relationship between satisfaction and perceived effectiveness (N. A. Johnson, 1988).

Among high school principals, the facet "having a sense of accomplishment" was strongly related to overall job satisfaction, to perceptions of school and leader effectiveness, and to various effectiveness criteria (Gunn, 1984). Other apparent sources of satisfaction and perceived effectiveness were the quality of working relationships with teachers and the attitudes and performance of teachers. The elementary school principals in N. A. Johnson's (1988) survey expressed general satisfaction with their work; working with teachers and students was a significant aspect of their overall job satisfaction. Other facets of job satisfaction were the effect of the job on personal life, standing in the community and sense of accomplishment. A major factor in overall job satisfaction of junior high school principals was a sense of accomplishment as an administrator (Sroypan, 1988). Junior high school principals appeared to gain most satisfaction from working relationships with students and teachers. Level of satisfaction was related to selected personal and school characteristics.

The high school principals in Gunn's (1984) study regarded the morale of students and teachers as well as achievement in postsecondary institutions as valid indicators of school effectiveness. Leader effectiveness was perceived to involve sharing leadership functions, making decisions effectively, positive interpersonal relations and assisting others to reach goals. The most important bases of influence were personal qualities, expertise and interpersonal skills. Elementary principals in N. A. Johnson's (1988) study tended to view schools as effective, particularly in relation to maintaining appropriate climates. Teachers and superintendents were less positive about school effectiveness than were the principals. Principal respondents considered themselves effective leaders, especially in relation to exercising exemplary behavior. Principal's in Sroypan's (1988) study indicated that the most important criteria for assessing effectiveness of junior high schools were related to school goals, expectations, climate and achievement. Criteria for assessing principal effectiveness were related to decision making and communication. An appropriate school climate was central to effectiveness of junior high schools. For junior high school principals, an important dimension of their personal effectiveness as a leader was providing feedback to staff (Sroypan, 1988).

Stress

Research into stress reflects the emergence of a research theme that was initiated only in the early 1980s. Two studies have been based specifically on the concept of work-related stress, two have investigated burnout, and one has explored administrator frustration. In the initial study, M. Williams (1981) examined the relationship of work-related stress experienced by teachers to selected personal, professional and organizational factors. Subsequently, the work-related stress of school principals was investigated by Jankovic (1983).

More than three-quarters of the teacher respondents in the M. Williams (1981) survey in an urban school district reported moderate to considerable stress. Subgroups formed on the basis of personal and professional characteristics differed in perceptions of sources of stress. A factor analysis of the questionnaire used suggested five stress factors: relationships with colleagues, teaching tasks, workload, relationships with students and job security. In contrast to teachers, the majority of principals in the Jankovic (1983) study interpreted their levels of stress as necessary, desirable and reasonable. Most of the stressful situations identified were of an interpersonal nature. The most frequently used, and most effective, method of dealing with stress was engaging in task-oriented activities. The net effect of three recently-implemented administrative changes in the district, which gave increased decision responsibilities to schools, was a reduction in stress for a large proportion of principals.

In the two studies based on the concept of burnout, the condition was defined as a psychological state characterized by emotional exhaustion, cynicism and negative attitudes toward self and work. More specifically, three dimensions of burnout -- emotional exhaustion, depersonalization, and lack of personal accomplishment -- were used in the investigations.

Results of a survey by MacPherson (1985) suggested that burnout was not a major problem among school principals. Only moderate levels of burnout were recorded in relation to personal accomplishment; levels on the other two dimensions were lower. Selected personal and situational variables were related to level of burnout. Factors that may contribute to burnout include job demands, staff relations, students, teacher evaluation, getting teachers to do their jobs and mediating disputes. Analysis revealed that self-reported burnout was associated with other variables such as stress, role conflict and role ambiguity.

Sarros (1986) found differences in the nature of burnout among teachers and administrators. Teachers in the survey sample exhibited lower levels of emotional exhaustion and depersonalization but higher levels of lack of personal accomplishment than the established norms. Administrators recorded lower levels than norms on all three sub-scales. Average levels of burnout on emotional exhaustion and personal accomplishment were higher for teachers than for administrators. Differences were also observed across groups established on the basis of personal characteristics. Degree of role clarity did not appear to be a factor in level of burnout for either teachers or administrators. Work situations identified as contributing to burnout included work load, time constraints, intraschool factors, negative attitudes and interpersonal experiences.

In a study that is related to the general area of stress, Korella (1983) focused on the sources, effects and consequences of administrator frustration, which was defined as the blocking or thwarting of goal directed behavior, in a college setting. The source most frequently identified by administrators was associated with interpersonal relations; superordinates were significant contributors to this source of frustration. The immediate effects tended to be negative such as anger or withdrawal if the blockage could not be resolved. In contrast, the immediate effects were likely to be positive -- creativity, increased energy -- if the blockage could be resolved. In general, administrators were comfortable with the level of frustration and experienced success in resolving blockages. Work groups tended to be more supportive of administrators experiencing frustration than were superordinates.

Support for Members

A number of related processes -- supervision, consultation, staff development and inservice education -- are all directed at providing organizational support for the activities of individual members. The first study in this general area was conducted on supervision; however, this did not lead to the development of a continuing line of research. After a delay of about fifteen years, studies were initiated on consultation and staff development, followed later by research on inservice education.

Supervision

Approaches to supervision in schools were examined in two studies; one was conducted by Brown (1961) and the other by Boulet (1981). A third study (Wanga, 1983) focused on the supervision of student teachers.

In the initial study, Brown (1961) investigated the effects of stress-inducing supervision on teaching performance in a controlled experiment involving student teachers. A major hypothesis in the study was that certain personality characteristics were an important contingency factor in this relationship. In general, stress-inducing supervision resulted in a slight decrement in teaching performance; however, there were differences between subjects. For example, the performance of low neuroticism and low scholastic aptitude subjects improved significantly during the treatment. The researcher concluded that the results supported the theory and emphasized the importance of differentiating supervisory procedures.

The potential of the clinical model of supervision as a realistic alternative to conventional classroom observation procedures was investigated by Boulet (1981). Four principals and four cooperating teachers were involved in a study that had both a training component and an observation component. Results suggested that clinical supervision does have potential as an alternative to conventional practices, and also that time constraints are a significant factor in the adoption of clinical supervision. Establishing the collegial relationship required may not be as much of a challenge as is finding the time to engage in clinical supervision.

In a study of supervision during teacher preparation, Wanga (1983) collected data on the feedback given by supervisors to students during the student teaching period. Cooperating teachers were rated more favorably by students than were faculty consultants. Classroom management and the presentation of lessons were the topics discussed most frequently during supervisory conferences. Supervisor supportiveness appeared to contribute to satisfaction of student teachers and to perceived effectiveness of the supervisor.

Consultation

While supervisory processes place emphasis on activities initiated by the superordinate or specialist, consultation refers to the activities initiated by the subordinates. Studies have been conducted into the consultative needs and practices of teachers at the elementary, junior high and high school levels. In the first of these studies, Haughey (1976) found that elementary school teachers shared ideas about students, teaching materials and teaching strategies, subject matter and diagnoses of learning difficulties. Teachers were generally satisfied with consultative assistance; in many instances the consultant was a colleague. The reasons teachers gave for not seeking assistance included not knowing whom to ask for assistance and not having the time to seek assistance.

A subsequent study by R. C. Harrison (1978) confirmed that assistance was generally sought from colleagues; principals were a secondary source for junior high school teachers. Teachers indicated that the highest recurring concerns were in areas such as motivating students, obtaining student background information, diagnosing individual differences, selecting instructional materials and planning behavioral objectives. Consultative assistance was generally rated as satisfactory except in areas relating to individualized instruction, creating remedial materials and solving peer conflict. Millikan (1979) conducted a related study among a sample of high school teachers. The teachers reported that the greatest need for consultative assistance was in the curriculum/program and counselling/student services areas. Student tardiness and absenteeisms were also frequently mentioned as specific concerns. Assistance was most frequently sought from teacher colleagues. Teachers reported a lack of time for seeking consultation and a lack of access to formally-designated external consultants. Some expressed difficulty in communicating with the most appropriate in-school personnel.

Staff Development

The concept of staff development has generally been applied to organizational support activities at the postsecondary level. Broadly defined, the concept relates closely to individual and organizational renewal. Research has been conducted in colleges in Alberta and at two universities in other countries.

An analytical framework for describing and analyzing staff development was proposed and tested in a college setting by Collin (1977). The analytic framework had four main dimensions: needs, mode of operation, level of functioning and strategy. Each of these dimensions involved specific variables that were shown to be operative in the staff development programs in two colleges. The application of the framework revealed gaps and variations in emphasis in the two settings; consequently, the framework has potential for use in planning staff development activities. In subsequent studies, Weleschuk (1977) determined the nature of the need for inservice education or staff development as perceived by administrators and instructors in nine colleges while Aidoo-Taylor (1986) examined the characteristics and effectiveness of activities in an institute of technology.

Results of the analysis of the questionnaire data in Weleschuk's (1977) study revealed that main content areas in which need was expressed included understanding adult students, diagnosing student needs, organizing learning activities, improving teaching strategies and improving knowledge of teaching specialty. Instructors indicated a stronger need for development than did the administrators. Desired methods for achieving staff development included group discussion, guided practice and professional reading.

Aidoo-Taylor (1986) found that members of the institute of technology perceived staff development activities to be directed more toward addressing institutional requirements than individual needs. The improvement of teaching seemed to be addressed primarily at the induction stage for new instructors. Subsequently, the emphasis shifted to helping staff members complete degree programs in Education. In spite of the emphasis given to staff development at the institute, some staff members did not participate for reasons such as uncertainty about objectives, limited opportunity for informal activity, inappropriate timing and lack of relevance to perceived needs. Previous experience and education also seemed to be related to the levels of interest and participation.

The questionnaire used by Weleschuk (1977) was modified by Prachongchit (1984) for a study of the need for faculty development in a university in Thailand. A survey approach was used to obtain responses from both faculty members and supervisors on aims, methods and organizational arrangements. Results indicated a low level of activity in relation to staff development and a consequent perceived need for more emphasis in this area. The greatest needs were related to instructional and personal improvement. Respondents with limited experience perceived a greater need for faculty development than did other groups. The researcher recommended an explicit commitment to faculty development in university policy and identified some implications of such a policy.

In a slight departure from the emphasis in earlier studies, Ramaiah (1984) focused on the need for instructional development, that is, specifically on the faculty member's role as a teacher. Instructional development was defined to include enhanced knowledge of the discipline, improved instructional methodology, greater sensitivity to student needs and greater understanding of contextual factors. Results of the study conducted in the University of Malaya indicated that there was a need for instructional development, particularly in the areas of priority objectives, using appropriate instructional methods and obtaining institutional commitment to instructional development. Differences between certain categories of faculty members suggested that there was higher perceived need for instructional development by those with greater sensitivity to instruction as well as by those with less experience.

Inservice Education

Research in the area of inservice education has tended to relate to the preferences or needs of teachers for such support. Teacher preferences for university off-campus courses and school district sponsored inservice courses were examined by Burke (1980). The actual impact of a planned inservice program intended to influence classroom behavior on the interactive thoughts of teachers was investigated by Tuckwell (1980). In an interpretive study, Pansegrau (1983) examined the perspectives on inservice education of teachers in two school systems. Ikonne (1985) analyzed the inservice education needs of secondary school teachers in Nigeria, and Navarro (1985) studied perceived needs of university faculty members for services offered in computing applications.

The study conducted by Burke (1980) also had an evaluative component. Results of questionnaire and interview data collection involving teachers who had recently participated in professional development activities indicated a gap between preferences and actual practice. Respondents perceived differences between university and district courses, and expressed a preference for more active involvement during these activities. Nevertheless, respondents evaluated the programs as either "moderately" or "quite" effective in meeting the majority of objectives.

Results of Tuckwell's (1980) research indicated that there was neither widespread nor systematic change in the interactive thoughts of teachers as a result of participating in an inservice program. Although change in overt behavior was both widespread and complex, there was no evident systematic impact on teaching behavior. A lack of congruence between change in interactive thinking and change in classroom behavior suggests the existence of other than a simple correlation between the two variables.

The teachers in Pansegrau's (1983) study tended to perceive the inservice activities in which they participated as falling into four discrete groups: (a) mandatory, formal and related to compulsory program changes; (b) other mandatory formal; (c) formal, voluntary; and (d) non-formal. Only the first was intended to effect a major change in classroom behavior. Other activities were perceived as means to obtain information and to exchange information, to obtain confirmation of present practices and to obtain a break from routine. Participation in various non-formal activities was perceived as a way to improve classroom effectiveness.

Although administrators and teachers in a Nigerian context differed in perception of needs, there were few difference in preferences for meeting the needs (Ikonne, 1985). A particular aspect of need was overcoming difficulties in performing tasks related to curriculum and instruction. There was general agreement that the state ministry should organize and finance inservice programs. An incentive for participation would be to grant credits leading to higher qualifications.

In a study of needs perceived by university faculty members in relation to computing applications, Navarro (1985) gave three areas specific attention: information seeking behavior in relation to the use of computers, current computing applications and appropriateness of computer services for different areas of application. Survey respondents indicated a need for information on compatibility among microcomputers and a need to attend workshops on computing applications to learn about applications in relation to research. Some concerns were expressed about overload in the system and response time, but no major problems were perceived. Communication between users and the unit that provided the service was generally perceived favorably. In general, there was a need for more information about the system and ways in which it could serve the objectives and needs of users.

Summary

Research into the relationships between individuals and organizations is highly diverse and does not lend itself to ready categorization in terms of a limited number of themes. One of the first themes to be initiated relates to characteristics of groups and individuals; studies in this area tend to revolve around personality and attitudinal variables. Two research themes that originated in the mid-1960s relate to organizational membership and organizational climate. The ways in which organizational life is experienced was extended to analyzing sources of satisfaction in the mid-1970s and to exploring the nature of stress in the 1980s. Research into the forms of support that organizations provide for members -- supervision, consultation, staff development and inservice education -- has been conducted primarily since the mid-1970s.

Results of the studies completed in this general area confirm the variety and complexity of organizational life as well as the differential ways in which this is experienced by different individuals and groups. Although various relationships have been explored, there is only a limited basis for assuming that they are generalizable across different contexts. Analyses of group and individual characteristics have revealed numerous differences but none that are regularly predictable or invariable. The more obvious factors, such as experience in education or tenure in a particular position, appear at times to be more relevant than are personality variables. Research into organizational membership has not identified any major areas of conflict or dysfunctionality. Teachers appear to relate positively to their professional organization, and the organizational structure is generally compatible with their expectations. Students may be subjected to more stress than are other groups in the individual-organization relationship; however, this does not appear to contribute to sharp differences between them and adult groups or the administrative structure. Although some specific relationships between climate and other variables have been identified, the way in which climate is experienced and perceived varies according to position in the structure and to various personal and professional characteristics of organizational members.

Similar sources of variation are evident in studies of job satisfaction; levels of satisfaction vary with factors such as communication practices, position in the hierarchy, involvement in decision making and administrative support. Research into supervisory processes and into consultation has confirmed that educators receive assistance from peers as well as from superordinates. Inservice activities may have more impact on how teachers think about their work than on actual behavior. Each of the subthemes opens further opportunities for attempts to increase knowledge about organizational dynamics.

7

Educational and Organizational Change

The general topic of educational and organizational change addressed in forty-five theses encompasses three distinct research themes. The first relates to various developments in educational systems including goals, structures and programs. A second theme relates more directly to change in organizations, particularly with reference to the processes through which change occurs or is initiated. The third theme is that of evaluating both innovative projects and more established programs. Evaluation research is included in this chapter because evaluation may either relate to changes that have been implemented or be conducted to determine whether or not there is need for change.

Educational Development

The evolution and development of educational structures and programs was the focus of a number of studies. Some of these adopted a historical perspective while others examined emerging changes or proposed possible future developments in education. The research has focused on all levels of education including schools, school districts, provincial and national educational systems, colleges and universities.

System Development

As might be anticipated, some studies of educational development have a strong historical emphasis. In the first of such studies the evolution of thought governing the nature and purpose of public schools in the Northwest Territories and Alberta was traced by Hodgson (1964). Subsequently, Scott (1973) examined factors associated with the expansion of secondary school facilities, and the diversification of the secondary school program, in Jamaica over a ten-year period.

Through an analysis of official documents, Hodgson (1964) found that for the period 1885 to 1963 the major aims of schools in the Northwest Territories and Alberta encompassed a broad range of more specific goals. Changes in the emphasis placed on various specific goals occurred over time. In general, schools were regarded as institutions for the development of young people; their role in social change tended to be conservative. Most changes in schools resulted from the central authority's attempt to adapt schools to the changing nature and demands of society.

The major developments in secondary education in Jamaica from 1962 to 1972 included introducing a common entrance examination, reserving a specific proportion of places for children who had attended public elementary schools and introducing junior secondary (grades 7-9) schools (Scott, 1973). With the development of new types of secondary education, deficiencies developed in the workforce. There appeared to be a discrepancy between the type of education people wanted and the type that would serve their interests and further national development.

Later studies of educational development at a national level gave some attention to the influence of external aid. Such studies have focused on both Barbados (B. F. Peters, 1976) and Papua New Guinea (V. J. Martin, 1988). A different perspective on external sources of assistance was developed by D. G. Marshall (1980) in a study of the relationships among characteristics of project leaders and project effectiveness as these related to Canadian International Development Agency projects.

The specific focus of the study by B. F. Peters (1976) was on the contributions of external assistance to the planning, implementation and financing of educational development in Barbados between 1960 and 1975. During this period, there was expansion in and improvement of services and facilities as well as qualitative improvement in programs. External assistance was most evident in qualitative reforms at all levels and in the development of tertiary institutions. The researcher advocated future emphases on external assistance as an instrument of fundamental change; adult and teacher education were identified as high priority areas.

Major sources of external aid to educational development in Papua New Guinea from 1975 to 1985 were multilateral, through the World Bank and the Asian Development Bank, in the form of both credits and loans (V. J. Martin, 1988). As in the case of Barbados, the external aid appeared generally to have been both beneficial and timely for educational development. Factors that contributed to the effectiveness of the aid included consonance with the nation's development priorities, improved educational planning, effective communication with aid agencies, and understanding of donors' policies and procedures. Among the factors that inhibited the effectiveness of external aid were reductions in government support as well as lack of provincial commitment to educational planning, limited interdepartmental planning and cooperation, and absence of detailed implementation plans for aid-assisted projects.

The specific relationship investigated by D. G. Marshall (1980) related to developmental ethnocentricity of project leaders, position power of leaders and project effectiveness. Generally, project leaders were characterized as being developmentally ethnocentric and as exercising a high degree of position power in relation to host nationals. Projects were viewed as most effective in terms of being flexible and adaptable; they were least effective in people change. There appeared to be no relationship between a project leader's developmental ethnocentricity and the leader's perception of the effectiveness of the most recent developmental project.

In a study of another area of education, Hezekiah (1987) analyzed the development of nursing education in Trinidad and Tobago. Particular attention was given to the forces that shaped society generally and, in turn, influenced the development of nursing education. Results of the analysis, based on interview data and documentary sources, indicated that nursing education was shaped by an amalgam of British, North American and indigenous factors. Administrative practices from the colonial period, as well as economic factors in the post-colonial period, influenced the progress of nursing education. The historical incremental approach to policy making continued to be used by the national government. Attitudes grounded in the view of nursing as a predominantly female occupation hindered development. Although the United States and Canada were sources of influence on nursing education programs following independence, nursing practice continued to reflect British traditions. At various stages, key figures played significant roles in promoting the advancement of the nursing profession.

Postsecondary Development

A cultural and conceptual analysis of the general area of adult education was undertaken in two studies. Loken (1968) analyzed the governance of folk high schools in Norway in terms of the historical development, the forms of internal and external governance and the overall pattern of basic design. An interest in alternative conceptions of adult education prompted Alexander (1985) to study the writings of Moses Coady who was a leader in an adult education movement in the 1930s in Nova Scotia.

The development of folk high schools in Norway reflected the operation of geographic, linguistic, demographic, religious and technological factors (Loken, 1968). External control was exercised through cooperation among national, regional and local governments by means of a shared approach. The folk high school was deeply imbedded in the social milieu of the country and mirrored dominant cultural values and philosophies. An understanding of folk high schools requires an understanding of the interplay of dominant philosophies, situational factors and organizational behavior.

Alexander (1985) observed that trends toward the increasing professionalization and bureaucratization of adult education would likely jeopardize the social movement conception. An understanding of adult education prior to professionalization held potential as a basis for critiquing current trends. Results of the analysis indicated that Coady's conception of adult education involved unlocking life for all people, real thinking and living life fully. In the context of the time, the conception of adult education as liberation challenged existing social institutions and practices. The ideas also serve to challenge current adult educators to assess who is being served, how adult education is being conducted and to what end. The researcher concluded that there was need for a new model of professionalism that would be compatible with a liberation interpretation of adult education.

Other studies on postsecondary education have concentrated on the need for new types of institutions, colleges in particular, and have also monitored developments. Farquhar (1967) examined needs in Alberta while Workman (1975) documented factors associated with the development of colleges in British Columbia. Other studies have focused on structures at the institutional level (Rose, 1981) and at the provincial level (West, 1982).

The purposes of the study by Farquhar (1967) were (a) to provide an analytic survey of developments in the provision of educational opportunities beyond secondary school in Alberta, and (b) to provide some guidelines for future development. Results indicated that there was a need and a demand for more diverse educational opportunities; however, no coordinated plan for postsecondary education had evolved. Existing colleges were not achieving the expectations and objectives of educators and legislators. Results of the study indicated that there was agreement on the desired direction of college development and that authoritative action by government would receive wide support.

A study of eight colleges by Workman (1975) revealed that development during the 1958 to 1971 period in British Columbia was perceived as a way to reduce costs to students, to facilitate transfers to university and to provide increased educational opportunities. Other factors included the timeliness of a commission report, the growth of population acting in concert with a desire for more education and the perception that colleges filled an educational gap between attending university and entering the labor force.

Rose (1981) conducted a case study of the evolution of the board of trustees in the governance of a church college. Results indicated that the major historic roles were similar to those of governing boards in universities; however, there were not as many conflicting roles. Students and faculty did not have membership on the board, but there was openness on the part of board members toward broadening the representational base. This view was consistent with the mild internal pressure for some decentralization of decision making.

In a study of the development of postsecondary education in Alberta from 1966 to 1973, West (1982) gave specific attention to the establishment of a Department of Advanced Education. A change in governing political party was a significant factor in replacing the universities and colleges commissions with a department, even though there was a general trend toward a tighter control of postsecondary education. During the period that was studied, what the researcher termed as "raw politics" appeared to play a significant role in the development of postsecondary education in Alberta.

Structural Change

The structural changes in education that have been of interest involve reorganization at both the district and provincial levels. Factors related to stability and change in the form of school district reorganization in Manitoba were examined by Bergen (1967). Iles (1984) analyzed the reorganization of seven school jurisdictions into two in a particular geographic area with specific reference to the factors that led to the reorganization, the procedures followed and the resultant consequences. Only one study (R. J. Chapman, 1974) was related to provincial level structures.

Historical, political and sociological factors were significant determinants of the form of district organization and shaped the legislation for reorganization in rural Manitoba (Bergen, 1967). The main impetus for reorganization came from the provincial level; demonstrating the need for change by itself did not bring about change. Local school districts neither sought nor demanded change, and leadership at the provincial level was of paramount importance. An examination of the historical context of an apparently successful district reorganization (Iles, 1984) revealed the presence of longstanding conflicts related to religion, language and ethnicity, school district boundaries and transportation, taxation revenue, school location and inter-town rivalry.

Previously, legal and political considerations had led provincial education authorities to use various interventions to manage jurisdictional conflict with limited effectiveness. Reorganization of the districts resulted from a consultancy study in which key representatives had considerable influence. Critical factors leading to the reorganization included prospects of increased revenue to all districts, a cooperative approach by local trustees and timely political judgments by the minister. The jurisdictional reorganization contributed to the removal or diminution of sources of many past conflicts; however, other issues with potential for conflict emerged after reorganization because the anticipated economic development was delayed.

A survey approach was used by R. J. Chapman (1974) to examine the extent to which a regional approach to the administration of education had been adopted in the Canadian provinces and territories, the rationale for regionalization and the operational features of regionalization. At the time of the study some form of regional office, basically an extension of the department of education, existed in eight provinces and the Northwest Territories. Comparisons indicated that these could be rank-ordered in terms of the degree to which responsibility for particular functions had been delegated to regional units.

Development of Goals

Research into organizational goals has been conducted in relation to both colleges (B. W. Pickard, 1975; Nnabuo, 1983) and universities (Sadighian, 1975; Solon, 1990). The general purpose of the studies was to clarify goals as well as to suggest an expansion of activities in particular goal areas.

A study by B. W. Pickard (1975) addressed one specific aspect of community college goals, namely, the service functions designed to assist community organizations to achieve their goals. A case study of one college revealed that community organizations perceived the community service goal as legitimate and themselves as willing participants in projects. High priority was given to identifying existing and emerging needs, as well as to establishing interorganizational contacts to supplement and coordinate community organization programs.

Through a survey design, Nnabuo (1985) conducted a study of the perceived goals of colleges of education in Nigeria with particular reference to the teacher preparation programs. The major goals of teacher preparation programs included professional development, the integration of theory and practice, and developing improved teaching methods. Administrators and instructors perceived physical education as receiving least emphasis while students gave inservice education the lowest rating. The means to achieving goals -- methods of instruction -- were primarily through lecture formats. Major problems associated with achieving goals had an economic base. Solutions to problems advocated were decentralization of decision making on teacher education and a more equitable allocation of resources across colleges.

By means of a literature survey, Sadighian (1975) explored the possibility of proposing an expansion of goals and improvements in the structure of Iranian universities through the identification of North American practices that appeared to be compatible with the Iranian social context. Results of the study supported the view that some North American practices merited attention for possible adoption. However, adopting practices did not mean that their philosophies could also be transplanted without change. One problem perceived by the researcher was that Iranian universities, at the time of the study, did not assume the type of active role that could enhance the possibility of introducing change in their goals and governance.

Solon (1990) conducted a study to examine university goals in Papua New Guinea from the perspective of official documents, ratings of present and preferred goals using a standardized instrument, and focused interviews in two universities. Most of the goals usually associated with universities were considered to be appropriate. Among the highest rated goals were academic development, intellectual orientation and advanced training. A number of goals specific to the context -- training national university staff, participating in planning higher education, promotion of language and mathematics skills -- were also rated highly. Some differences were observed between administrators and academics. Differences between the universities reflected their particular orientations. Among the problems perceived as inhibiting goal achievement were the diverse socio-cultural practices, inadequate finance, public misunderstanding of goals and inappropriate curricula.

Community Schools

Three studies focused specifically on community schools or community education. Prout (1977) investigated the development of community education in Canada and described the environmental conditions that impinged on these developments while K. C. Sullivan (1977) analyzed community schools and the environmental factors associated with such schools. More recently, Quarshie (1989) studied community schools in an urban context. In general, community schools are intended to serve the total community and not just the school-age population.

The results of Prout's (1977) survey revealed that community education was largely oriented towards programs and activities for adults and was perceived as a way of making efficient use of facilities. Regional differences were evident in the development of community education. Legal, political and economic conditions tended to inhibit development while ecological, cultural and demographic factors prompted department or ministry participation in those educational developments.

Both corroborative and contradictory results were obtained by K. C. Sullivan (1974) in a study that was focused on the individual school. When compared with other schools, community schools based their programs to a significantly greater extent on local community activities, had more programs for students and adults, and had more community involvement in decision making. Initiatives to establish a community school usually came from the principal or the school board. Community schools existed under various cultural and socio-economic conditions; demographic factors influenced the types of programs offered.

Quarshie (1989) did a comparative analysis of the operation of three community schools in an inner city, suburban and rural setting. Although the nature and function of advisory committees varied, together with other committees they facilitated realizing the characteristics of community schools. In all three schools, the factors that facilitated implementation of community school characteristics were commitment of people to the concept, availability of staff and leadership, and funding. Variations in environmental conditions resulted in some differences in programs, activities and processes across the three schools. However, all of them emphasized a community related curriculum, involvement of members of the community, cooperation with other agencies and community use of facilities.

Organizational Change

Studies of change in educational organizations have covered a broad range of specific problems. Three general themes have revolved around the sources of change, concepts of change, and studies of actual program or organizational change.

Sources of Change

A general question about change relates to the identification of specific possible sources of influence that initiate or give impetus to change. In addition, the relative importance of forces internal to an organization compared with external factors has also been of interest. An attempt to identify factors that might explain different levels of innovation in schools was the focus of a study by Marion (1966). In another school-level study, Wiens (1967) investigated the relationship among attitudes toward change held by teachers and influentials, social interaction patterns in the school and satisfaction of teachers with the amount of innovation. Focusing on the district level, Earle (1968) examined sources of influence for instructional innovation in Canadian urban school systems during the 1954-1964 period.

In contrast to less innovative principals, Marion (1966) found that the more innovative ones tended to be younger, more cosmopolite, more professionally-oriented, more influential with peers, more mentally flexible and more likely to have recent university courses. Innovative principals tended to work in schools that were situated in higher socio-economic communities and that were staffed by teachers who favored the adoption of new practices. Wiens (1967) concluded that innovativeness in a system is related to the state of the system as well as to external factors. Persons who are at the center of communication networks, who are relied on for advice, and who are perceived to be influential, are the ones whose attitudes are significantly related to innovativeness. Satisfaction of teachers was not related either to the actual amount of change or to attitude toward change.

According to the perceptions of superintendents, Canadian education in the period from 1954 to 1964 was characterized by stability rather than by change (Earle, 1968). Sources of influence outside the school system were not perceived to be as important as were internal sources in relation to change. The significant agents of change appeared to be the educators at the system level. Nevertheless, some persistent sources of influence were present in the environment including the general public, professional education associations, universities, commercial organizations and private foundations.

Change Processes

The process of change has usually been investigated through case studies. Settings that have been researched include schools (Prebble, 1975; Alpern, 1986), a hospital (Elliott, 1985), a university faculty (Mishra, 1986) and a college (Hall, 1989). The general methodology has been qualitative while the orientation has become increasingly interpretive.

Some grounded hypotheses of educational innovation were generated by Prebble (1975) through a case study of a particular innovation, namely, the implementation of a four-day instructional week in a high school. The hypotheses related to the tendency for objectives to multiply, the incompatibility of a proliferation of objectives, the difficulty of setting priorities among objectives and the tendency for various actors to view innovations in terms of their own perceptions of the objectives.

Elliott (1985) conducted a longitudinal case study into the process of change in a large hospital relating to the implementation of a teaching program for patients with chronic illness. Over a period of two years, the researcher collected extensive data using interviews, documents and field notes. Numerous features specific to the particular change were documented. Among the general conclusions were that change is a process not an event, that change progresses through stages in a contorted way and that the change process is influenced by numerous factors. In this specific instance these factors included leadership, support of others, resources, clarity and complexity of the change, and provisions for staff development.

Seven specific issues were selected for analysis by Mishra (1986) in a study of adaptation by a faculty of education in response to external pressures. Results of the analysis indicated that the faculty was influenced in various ways by different segments of the environment which exerted pressure in the form of requests, resolutions, recommendations, demands and policy changes. Adaptation was influenced by both internal and external forces which could either facilitate or impede the process. Among significant external factors were financial, stakeholder support, interests of powerful individuals or organizations and the presence of coalitions. The internal factors included attitudes of faculty members, embeddedness of the focal organization in a larger organization (the university) and administrative strategies. Although the organization tended to respond reactively, at times proactive measures were taken to influence the environment.

Alpern (1986) selected for study an inner city school that had undergone a change over a period of years from being generally perceived as having major problems to being recognized for providing leadership in developing innovative programming for inner city and other youth. The researcher regarded this as a change in the culture of the school and used an interpretive approach to explain how the change to a more effective school was accomplished. Results supported the conclusion that the interaction between bureaucratic and cultural initiatives contributed to the change in the school's culture. Similarly, interactive changes within the internal and external environment contributed to the change process. A dominant element in the process of attaining cultural change was enactive behavior -- interpretation of needs, goal setting, and establishment of priorities -- which shaped perceptions that the school was more effective and projected a more positive image.

The general focus of a study by Hall (1989) was to explore how the leadership in a college used interpretive and adaptive strategies to manage the organization in the broader context of environmental adaptation. A critical incident in the environmental or adaptive strategies was the selection of a president who proved to be instrumental in transforming the college. However, throughout its history, various incidents were critical in changing the college, and a variety of adaptive strategies had been used. Important factors in the ongoing "managing" of the college were the culture of the organization and the environment. Organizational change was facilitated by clarifying and articulating the goals of the college, a climate of trust and support, meaningful involvement and effective use of symbols.

Change Concepts

Although the case studies of change usually lead to insights into the change process, at times the conceptual aspects have been addressed more directly. In one of these studies, Sanders (1983) conducted a systematic analysis of relevant literature in order to develop a set of propositions relating to the parameters of, and pivotal factors associated with, the decline and death of organizations. The usefulness of two particular models of change for analyzing and describing four educational intervention attempts was explored by F. Peters (1986).

Sanders (1983) concluded that such acts of management as the failure to recognize, to plan for and to deal with decline were significant factors in decline. Organizational death -- the state of ceasing to exist as a unique entity -- appears to have many causes. Appropriate managerial strategies are required in order to deal with the short- and long-term effects of decline.

The four case studies analyzed by F. Peters (1986) were part of a project designed to encourage parents, community members and teachers to work together to improve the quality of education in northern communities. Both the Herriott and Gross model and the Fullan model were found to meet the six criteria selected for assessing usefulness. The models facilitated ordering of data and provided a focus for the examination of the interventions. Although they helped to simplify the phenomena, simplifying the understanding of complex processes was not a strength of the models. Both models proved to be useful in identifying important factors or tasks that were not attended to in the case studies; consequently, they may have value in planning implementation or change strategies.

Evaluation

Evaluation research encompasses a number of different emphases. Some studies focus on changes or innovations that have been implemented at least on a trial basis; others involve the evaluation of programs to determine whether or not there is a need for change. In addition, research has also been conducted on the process of evaluation.

Evaluation of Innovations

Various innovative projects or activities have been the object of evaluation. The effectiveness of a project that was intended to assist disabled learners and teachers of learning disabled students was examined by Fraser (1974). Hathaway (1975) tested the applicability of a network-based approach to curriculum development and implementation. A particular set of innovations in the structure of the workweek was the focus of a study by J. M. Wood (1977). Both a formative and a summative evaluation of a specific innovative instructional project was carried out by Doherty (1981) using the Stake framework. The purpose of a study conducted by H. A. C. Andrews (1987) was to describe and analyze the extent to which a particular educational innovation had been applied in three different nursing education programs.

Fraser (1974) applied the Lawrence and Lorsch conceptualization of differentiation and integration in relation to the effectiveness of the learning assistance project. Results of the analysis concerning relationships among environmental diversity, differentiation, integration and effectiveness lent support to the Lawrence-Lorsch propositions. Those involved in the particular project agreed that prescribed objectives were being achieved and that assistance was being provided for learning disabled children and their teachers.

Applicability of the network approach to curriculum development was defined in terms of effectiveness and efficiency, feasibility and usefulness (Hathaway, 1975). The network approach is based on the principles of the Program Evaluation and Review Technique. Responses of the educators who had been involved in the approach indicated that they regarded it as superior to alternatives. Some shortcomings were perceived in its technical character, lack of flexibility and limited information. Nevertheless, it was regarded as having potential for helping teachers to improve their classroom instruction.

The effects upon an organization of different ways of structuring the workweek -- flextime, standard hours and compressed workweek -- were included in J. M. Wood's (1977) analysis. Results revealed differences in perceptions between management and non-management personnel of the effects of different workweek structures. The non-management personnel involved in altered workweeks indicated higher job satisfaction as well as an improvement in family interaction and in personal relationships. These groups also reported decreased participation in leisure activities and increased use of car pools and public transit. Indications were that standard hours may be placing strain on management personnel. Altered weeks were associated with perceived decline in quality of service to clients.

The primary purpose of the project evaluated by Doherty (1981) was to implement learning approaches that would better meet the learning needs of home economics students with varying backgrounds and career aspirations. The formative evaluation provided data that were useful in carrying out revisions. An analysis of data from the summative evaluation supported continued implementation with certain specific revisions. The particular innovation evaluated by H. A. C. Andrews (1987) was the Roy Adaptation Model which uses concepts of person, environment, nursing activities and health as a basis for curriculum development in nursing education. In the three schools selected for study, various aspects of the model were evident in curricular documentation in relation to program structure, course content, classroom and clinical activities and student evaluation. The extent to which concepts associated with the model were actually implemented was not weighted heavily in evaluating the performance of staff. Some distinct differences were observed in the profiles reflecting the actual extent of implementation. In all three programs, there was concern about the complexity of the model, meanings of concepts and actual practice. All three programs had implemented key concepts but had adapted various features to suit the needs of the program, faculty, students and patients.

Two studies have evaluated organizational improvement processes. The effectiveness of an organization development intervention related to goal-setting in a college was examined by Cornish (1977). Institutional renewal in degree-granting home economics units was investigated by Crown (1978) with respect to the extent and nature of changes, characteristics of change-oriented units and determinants of effectiveness of a goal-specific renewal strategy.

The organization development intervention examined by Cornish (1977) involved the researcher as a participant. Attention was focused on the researcher's interaction in the intervention process, and on how participation in goal-setting simulation and information feedback impacted on perceptions of goals. The results of the study suggested that the intervention attempted was too complex and that some time was required to reduce confusion, mainly through participation. The simulation indicated that community and democratic governance were more highly valued as conditions for innovation than was freedom. In the study of home economics units, Crown (1978) found that the most extensive and pervasive changes had occurred in undergraduate programs. Extent of change was related to both the size of the unit and the size of the university; however, no one contextual or structural factor affected all types of change.

Program Evaluation

Programs that became the object of evaluation tended to be those designed for professional preparation. Among the groups represented are educational administrators (Sinclair, 1978), teachers (Bethel, 1981; Dickie, 1983) and health professionals (Ngatia, 1984).

Sinclair (1978) developed, tested and assessed an educational program designed to address the resolution of moral dilemmas faced by educational administrators. The researcher concluded that the Kohlberg rationale was helpful in the development of materials and guidelines for the facilitator; however, inclusion of the rationale as content was not fully supported. Participants felt that the program was an educationally worthwhile experience which resulted in improved sensitivity towards the existence of moral dilemmas.

The perceived effectiveness of teacher education programs in The Bahamas was investigated by Bethel (1981) in a study that has implications for the inservice education needs of teachers. Major strengths of these programs appeared to lie in those aspects of teaching relating to lesson preparation, lesson presentation and effective classroom management. Some weaknesses were perceived in relation to the development of diagnostic and remedial skills, interpersonal relationships skills and the administrative aspects of teaching. Although various aspects of the teacher education program were perceived to be in need of revision, the quality of instruction was regarded as a strength.

Dickie (1983) used a responsive approach to examine the teaching practicum at a small university. The general characteristics of the approach involve focusing more on program activities than on intents, responding to audience requirements for information and referring to different value perspectives in reporting the success or failure of the program. The analysis of data revolved around three issues that were identified as being of concern to members of the faculty: the integration of theory and practice, characteristics of and relationships among faculty members, and relationships involving students and cooperating teachers. The results of the analysis prompted the researcher to propose two hypotheses that go beyond the actual data. The first hypothesis is that permanent major change in an educational program in a limited time span is more likely to be accomplished if a committed and energetic individual initiates and guides the revised program. A second hypothesis relates to matching size of program groups to formal structure. Program groups must be large enough to achieve a "critical mass" but not so large as to require elaborate control structures.

In an evaluation of a preparation program for allied health professionals in Kenya, Ngatia (1984) collected data from graduates, heads of departments or faculties and faculty members who had not participated in the program. A multi-goal, theory-driven approach guided the study. Results of the study indicated that the program was perceived to be moderately effective by the respondents. Graduates identified the major strengths of the program to be related to classroom skills such as evaluating progress, preparing lessons and presenting lessons. In contrast, the department or faculty heads perceived the strengths as relating to communication skills and professional awareness. Graduates tended to rate negatively the day-to-day operation of the program such as availability of resources and the allocation of time to various components of the program.

Evaluation Processes

Both personnel and program evaluation have been the subject of studies that deal more with the process of evaluation than with the evaluation of individuals, projects or programs. In a study on personnel evaluation, Tenove (1982) examined competencies and evaluation methods as these were applied in the evaluation of community health nurses. A total of forty-five competencies was validated. Supervisors expressed greater satisfaction with evaluation methods than did the nurses. The latter expressed a desire for methods using a broader data base. Respondents expressed a belief in the use of competencies in evaluation. Results of the study indicated that it would be possible to develop competencies but that further research was required to identify them.

The development of a responsive evaluation framework for hospice care evolved as a major focus of McHutchion's (1987) study of family perspectives on dying at home. Interviews with key informants and participant observation led to the conclusion that people lacked information about what services were available to them, which ones might be helpful and how to obtain them. A responsive evaluation framework was proposed as an approach to evaluating and implementing hospice care initiatives. The framework is grounded in the needs of the patient and caregiver but includes also the perspective of the professional, the assessment of support needed by the family, an assessment of the capabilities of the health care organization and joint planning. In general, the approach may have potential for further development of the responsive evaluation framework.

Summary

Studies of organizational change have formed a continuing area of research interest, particularly since the mid-1960s. The theme has its origin in two research traditions: one grows out of organizational theory while the other is based more generally in theories of social change. Investigations into organizational change have revolved primarily around questions related to why change and innovation have or have not taken place, the processes through which innovation occurs, ways in which change might be introduced into organizations as well as approaches to evaluating the outcomes of innovations.

Results of the studies have confirmed that the impetus for some changes originates in the broad social, economic and political environment; however, members of organizations may also be key agents of change whether or not they hold administrative posts. In general, the process of change is complex and is not entirely subject to control. Attempts to develop ways of evaluating innovations have ranged from those that have a dominant applied orientation to those which place greater emphasis on testing a conceptual framework.

8

Decision Making

Research into decision making is closely related to the research on policy development and implementation which is reviewed in the next chapter. The main difference between the two is that the focus here is on more specific choices, including decisions made at lower hierarchical levels, rather than on those that have general or broad-ranging ramifications for the operation of an organization. A number of general themes run through the thirty-seven studies in this area: the process of decision making, participation in the process, control over decisions and information relevant to decision making. Studies on collective negotiations have also been defined as research into decision making for purposes of this review.

Process and Substance

The processes involved in decision making have been given particular attention in research both in field studies and through simulation. School boards have been the focus of a number of the studies. In addition to analyzing processes, researchers have also examined the substance or content of decisions.

Roles and Relationships

In a study of two school boards, Mathews (1968) gave particular attention to interpersonal relations among board members and between board members and the community. Interaction analysis was used by Hemphill (1968) and Holdaway (1968) to examine the roles of participants at school board meetings. Stewart (1968) analyzed the process of decision making within the framework of department of education-school board relationships.

Mathews (1968) observed both what were defined as programmed or routine and non-programmed or novel decisions in the operation of two school boards.

Although both boards had a basic pattern of interaction, the pattern associated with programmed decisions was different from that associated with complex decisions. The various board members exhibited distinctive roles and characteristics based on their personal backgrounds. Superintendents played a key role in decision making; their relationships to board members not only influenced the process but also the substance of the decisions. Both Hemphill (1968) and Holdaway (1968) examined the interaction roles of superintendents, secretary-treasurers and chairpersons at school board meetings. The results of Holdaway's analysis indicated that chairpersons and trustees made most of the structuring, soliciting and reacting moves while most of the responding moves were made by superintendents and others; administrators made more factual statements than did trustees. This was consistent with Hemphill's (1968) finding that the instrumental role performed by and sent to the administrator was that of informer. Participation by the superintendent varied with tenure and experience. In general, participants in these meetings acted in ways consistent with the accepted definitions of their roles.

On the basis of a case study, Stewart (1968) concluded that the issue which was the focus of the research arose primarily because two streams of decision making were on a collision course largely due to the lack of effective communication between the department of education and the school board. Different criteria were used in assessing the operation of the district in the sense that the department compared this district to other districts while the school board compared itself to past performance. The limited feedback contributed to difficulties in identifying dysfunctions in board operations.

Simulation Studies

The process of decision making was studied by a number of researchers through simulation techniques. Using an experimental design, Plaxton (1969) examined the relationship of the decision rules under which groups operate to interaction patterns, time to reach decisions, satisfaction and commitment. Results indicated that under a consensus arrangement group members requested and exchanged more ideas and were more supportive than in centralized groups. The length of the sessions increased as the decision rules changed from centralist to consensus. The non-leader members of groups were more satisfied with the majority rule and consensus arrangements than with that of the centralist arrangement. Riffel (1969) developed a computer-based simulation for research on decision making and explored the relationships among selected responses of a group of participants. The simulation included the description of a school and community, three decision tasks and 142 pieces of information. Results indicated that the more closely the simulation approximated the kind of environment in which the participants had experience, the more satisfied they were with the decisions.

The way in which judges integrated items of information in arriving at decisions about proposals for new instructional programs was investigated by A. R. A. Marshall (1976). The researcher concluded that the judgement process could be quantified for nine of the ten judges and that seven of the ten judges understood the relative importance of the criteria used in determining their judgements. Analysis of the process followed by inservice training might lead to more consistent judgements. The ability to describe the judgement process in terms of a linear model suggests the possibility of using automated processes to perform the integration phase.

Content of Decisions

The substance and outcomes of decision processes have also been of interest to researchers. Of the studies with this type of emphasis, two were conducted on school boards and one on a board in a postsecondary institution.

On the basis of a comprehensive examination of one school board using a political systems analysis framework, S. W. Martin (1969) found that the majority of demand inputs were extractive; no participative and only a few support inputs were identified. The aggregation of demands into a single policy proposal was the most significant function of the board. Governmental functions of the board were about equally divided between rule-making and rule-appreciation. The researcher concluded that the aggregation of demands into a single policy proposal was the most significant function of the board that was studied.

The results of a content analysis of school board meetings (Renihan, 1977) revealed that finance, business management and staff personnel were the most frequently mentioned topics while minimal attention was devoted to curriculum and instruction. The type and level of control exercised by the board varied with the operational areas; increasing numbers of decisions were associated with relatively less emphasis on policy decisions. The researcher recommended better use of time and effort by school boards, greater attention to curriculum and instruction, and greater emphasis on the quality rather than the quantity of policy decisions.

The decision making processes in postsecondary institutions with and without boards were compared by Walkington (1975) with respect to budget allocation. As a result of the analysis, the researcher concluded that the internal processes in the two types of institutions were similar. The boards did not set priorities for resource allocations but, instead, responded to priorities set by faculty and administrators. Institutions with boards had been no more successful than those without boards in gaining government approval for their budgets or for new programs during the year under study.

Participation in Decision Making

An aspect of decision making processes that has been given particular attention relates to the involvement of members and others in organizational decision making. The implicit question that appears to have prompted these studies concerns the appropriate degree of involvement.

Member Participation

A number of studies compared the actual extent of teacher involvement in decision making with their preferences for involvement. In the first of these studies, Simpkins (1968) analyzed the distribution of decision making authority in schools; the study was later replicated by Chung (1985). Masse (1969) examined the actual and preferred involvement of Quebec teachers in school-level decision making. A more formalized approach to participation in colleges was investigated by D. D. Wood (1991).

Results of the Simpkins (1968) study indicated that teachers in elementary, junior and senior high schools preferred a higher degree of involvement than they actually experienced, as well as greater variety in the means of participation. The formal staff group was viewed as an appropriate locus for the exercise of authority by teachers collectively. Masse (1969) also reported that there were some discrepancies between the level of participation teachers perceived they had and the level they would like to have. Teachers who were more positively oriented toward professional authority expressed a greater desire to participate in decision making than did those with lower professional orientations. In general, the results of Chung's (1985) study were consistent with the earlier research. Teachers perceived that they had substantial autonomy with respect to tasks related to the management of the classroom but that hierarchical control was pervasive in regard to other matters. Collegial control was generally perceived to be weak. Teachers preferred greater control over matters outside of the classroom than was the case. Overall satisfaction with involvement in decision making was related negatively to the discrepancy between preferred and actual level of involvement.

Generally similar results were obtained by Eastcott (1975) in a study of members of a university faculty. Faculty members favored joint action as an approach to participation over determination, consultation or discussion. They did not perceive the existing structures to be functional; preference was expressed for reduced time involvement and for a different type of involvement by some of the faculty members.

In a study of more formalized participation, D. D. Wood (1991) examined the participation of faculty, student and support staff representatives on college governing boards. Although institutional participation involves various political dimensions, the actual manifestation of political processes was less than that suggested by the theoretical framework. The researcher concluded that the level of political activity was reduced by the social characteristics of the public members of the board, the power of the president and the role expectations held for institutional members. Personal characteristics such as education, organizational knowledge and interpersonal style affected the roles of institutional members. They strove to achieve credibility by working within defined expectations, specifically that they act as trustees rather than as delegates of their associations. In general, institutional member participation on governing boards broadens communication within colleges and operationalizes beliefs and values espoused in higher education institutions.

Community Participation

In the first of two studies about participation by community groups in educational decision making, St. James (1966) compared opportunities for participation in the decision making of different types of school boards. Results indicated that participation was greater with partly-elected than with either elected or appointed boards. Although the least participation occurred with appointed boards, they appeared to be the most influenced by community views. Differences were apparent in the amount and effect of participation by professional education groups, education-oriented groups, business groups and special interest groups. The professional education groups were the most influential participants. Education-oriented groups focused attention on the instructional program, business groups participated in financial matters, and special interest groups tended to participate in relation to student personnel.

Grainger (1984) investigated the attitudes of both parents and educators toward participation by parents in local school decision making as well as factors related to the parents' propensity to participate. Results of interviews with twenty educators and twenty-four parents indicated that involvement of parents was generally perceived to be service and support oriented. Although significant involvement in decision making was limited, parents were divided regarding an expanded role. The educators were generally opposed to sharing decision making with parents at the level of the school. Both parents' and educators' views were grounded in conceptions of an appropriate parent-professional relationship. The propensity of parents to participate was related to numerous factors including a concern for their own children, support for involvement from educators, level of satisfaction with the school and confidence in their ability to make a contribution.

Situational Factors

The significance of situational factors in the involvement of students and faculty in decision making is evident in the results of a case study conducted by Kelly (1973) of a newly-created college which adopted an evolutionary approach to development. In the initial stages decision making was decentralized to department levels where there was a degree of student-faculty parity. Although the participative approach contributed to a favorable learning climate, there also were indications of frustration and fragmentation. The need for greater predictability and higher efficiency in decision making became apparent over time.

The validity and utility of the Vroom-Yetton model -- which was designed to guide administrators in deciding the nature and amount of subordinate involvement in decision making -- was tested in a school setting by Louden (1980). Teachers' perceptions of the degree of success of the decision were related to the extent of their participation. Data derived from teacher responses also suggested that decisions which were consistent with the model were more likely to be successful than those which were inconsistent.

Control over Decisions

An aspect of decision processes closely related to participation is that of control over decision making. The relative degree of influence or control over decisions has been examined both directly (March, 1981; Ewanyshyn, 1986) as well as in terms of centralization/decentralization (Caldwell, 1977). The major purpose of a study by Payne (1987) was to assess the extent to which parental influence constitutes a significant control over principal behavior.

The pattern of control over educational decisions, changes over time and factors related to the degree of control exercised at various levels were examined by March (1981). In a subsequent study, Ewanyshyn (1986) focused on the perceptions of trustees, central office administrators and principals in four urban districts regarding control over educational decisions.

Results of March's (1981) analysis indicated that for the large majority of items control was distributed among the three levels of the school board, the principal and the superintendent's office; teachers and the department of education had relatively low control over the decisions that were considered. From 1975 through 1985, school superintendents perceived a gradual increase in the degree of control exercised by principals and teachers; however, there was no marked change in the pattern of control. Over the 1975 to 1985 period decentralizing influences were perceived to be declining while centralizing influences over decision control were increasing in strength. The centralizing influences were mainly external to the educational system, such as economic and political factors, while the decentralizing influences were generally internal such as the administrative philosophy.

Ewanyshyn (1986) found that the principal's office, the superintendent's office and the school board were perceived to have major control over most decisions. Of the five levels considered, the highest level of control resided at the level of the principal while the least control resided at the individual teacher and education department levels. The greatest discrepancies between actual and preferred degrees of control related to economic matters, personnel management and community relations. In general, there was close similarity between the actual and preferred locus of control over educational decisions. Education department policy and provincial legislation were perceived to have a moderate centralizing influence over decisions. Only the personal philosophies of administrators acted as a slight decentralizing influence.

Decentralization of control over a certain category of decisions, namely budgeting, was investigated by Caldwell (1977). On the basis of a survey and case study approach, the researcher concluded that budget decisions in Alberta were generally centralized, that system characteristics were unrelated to the adoption of school-based budgeting and that more than just a change in locus of decision was involved. In particular, decentralized budgeting appeared to have important consequences for task, personnel and technology aspects of school system operation.

The Payne (1987) study into the relationship between parents and principals was conducted in an urban school district. Results indicated that the actions of principals reflected parental influence which was strong and increasing. The influence ranged from the highly specific to general monitoring of conformity to societal norms. Some parents were more influential than others. District policies and administrative practices encouraged parental influence but did not shape the direction of that influence.

Information for Decision Making

Research into the information required for administrative decision making has addressed both the specific needs and the processes through which the needs may be met.

Needs and Systems

A critical incident questionnaire approach was used by Cormier (1970) to determine the information requirements of school superintendents. The majority of information items were recorded, were obtained from staff and were judged to be from good sources. Although few of the information needs were expressed in statistical form, the researcher concluded that much of it could be incorporated into a management information system. Because staff personnel information was high on the list of requirements but was seldom recorded, special attention could be given to this area in the development of an information system.

An educational planning model for predicting the demand for teachers and the supply of teachers for the period 1971 to 1981 was developed by Richards (1971). Projections indicated a slight to moderate increase in demand for teachers at all levels. Supply projections indicated the probability of a slightly increasing supply over the ten-year period. In terms of the total teaching force, there were indications of a slightly excessive supply until the mid-1970s followed by a balance or slightly excessive demand. Some differences across grade levels and subject areas in supply and demand were also indicated. Murphy (1976) developed a program information system and tested its feasibility and usefulness in a community college. The application of the system illustrated its potential for generating data for identifying the strengths and weaknesses of programs, developing strategies for improving learning experiences and establishing satisfactory relations with a college's clientele.

The design, implementation and evaluation of a computerized student information system in a university department was the focus of a study by T. C. Montgomerie (1981). Although the system was evaluated as being successful, a number of problems were identified. Among these were delays in data entry, time required for problem solving, the need to develop a larger system than had been anticipated and premature evaluations.

Attitudes toward the implementation of a management information system termed human resources accounting were explored by Myroon (1982). Essentially, the system involves accounting and managing information about employees in ways designed to enhance their contributions to an organization.

Respondents in the survey included principals, superintendents and school district secretary-treasurers. The different groups varied considerably in direction and strength of attitudes toward human resources accounting procedures. Administrators with relationship-oriented leadership styles and secretary-treasurers had the more positive attitudes toward the accounting system. Implementation of human resources accounting might be initiated by using results of the study to identify the settings most receptive to the procedures.

The conceptual framework of Sawchenko's (1991) study of institutional research in Bible colleges encompassed three major areas: a planning and management system, a management information system and an operational data system. Although the colleges conducted research in all three areas, the extent of the activities was constrained by limited resources. Most of the research was conducted by senior administrators who applied the outcomes in decision making. Due to factors such as size, the collegial mode of operation and the extended tenure of administrators, most of the institutional research activities tended to be informal. More formalized institutional research activities and allocation of resources for the activities were prompted by external factors such as accreditation processes and institutional distress such as a financial crisis.

Program Monitoring

On the basis of the development and testing of a particular model, Collett (1981) concluded that macro evaluations of school programs have potential for providing useful information for decision makers. The data that were available permitted the identification of twenty general indicators and seven subject-specific indicators of quality education. Analysis indicated that the greatest amount of variance in these indicators was accounted for by predictors such as student program, pupil-teacher ratio, sex, ability, grade nine average and career plans. The high school program followed by the student accounted for most variance in quality indicators.

Symyrozum (1981) developed a school program index that could be used to monitor changes in school programs from year to year. In addition, the regression technique used to study the relationship between major curricular programs and selected measures of demographic, wealth, fiscal effort, revenue and expenditure related variables has potential for identifying policy and non-policy variables that seem to influence programming. Results of the study revealed that four factors -- jurisdiction type, senior high school enrollment, transportation expenditure and grants payments ratio to operating revenue -- accounted for one half of the variance in total instructional time provided in major subject areas.

Cost Analysis

Two studies were conducted into analyzing and reporting educational costs in ways that would be meaningful and useful to decision makers. In a program-based approach, Duke (1970) observed a cost pattern for different curricular areas. The low cost group in an urban school system included language arts, modern languages, mathematics, science, social sciences and physical education. The middle cost group was made up of fine arts and business education while home economics, industrial arts and technical education were in the high cost group. Variations in per pupil costs across schools were also observed through the use of analytical procedures.

In a subsequent study, Guy (1971) identified high, middle and low cost curricular programs in comprehensive schools in Saskatchewan. Programs such as agriculture and technology were in the high cost group while basic academic studies were in the low cost categories; however, total financial expenditures were higher in the low cost than in the high cost category. A general conclusion was that the program cost analysis provided a more extensive information base for decision makers than did the conventional function-object approach to accounting.

Collective Negotiations

Decision making in education through collective negotiations has been the subject of a number of investigations. In the first of these, B. K. Johnson (1971) related provisions of collective agreements to the goals of the teachers' association and of the trustees' association in Alberta between 1960 and 1969. Of the thirty-one bargaining issues that were identified, twelve were resolved at least partially in favor of the teachers' goals and six were resolved in favor of the trustees' position. The researcher concluded that there were indications of a growing balance of power between trustees and teachers, with the former increasing their relative influence throughout the period. At the time of the study, the area of conditions of professional service was the major unresolved issue, and there were indications that this would prove to be a source of increased conflict.

Rozycki (1981) compared the nature of negotiated items in collective agreements under centralized (Saskatchewan) and decentralized (Alberta) collective bargaining. Results indicated that Alberta average salaries for the majority of teachers were higher than Saskatchewan salaries and that the spread in salary differentials had remained relatively unchanged, indicating that this is due to the effect of factors other than the form of collective bargaining. One other difference was the greater scope of bargained items in Alberta as compared to Saskatchewan.

The interaction processes that underlie collective negotiations between school boards and teachers' associations have also been analyzed. Using Goffman's dramaturgic analogy, McLeod (1976) identified both backstage and frontstage performances, as well as factors resembling stage, backdrops and potential props. Education collective bargaining was revealed as an imposed order whose effectiveness hinges on the capacity of the controllers (government) to induce commitment to symbols and rituals. The researcher concluded that disputes appearing irrational to the provincial level interests were rational when viewed from the perspective of those at the school board level.

Collective bargaining relationships between a nurses' association and hospital employers over a six-year period were the focus of a study by Hibberd (1987). Of particular interest to the researcher was identifying the causes of three strikes during that period. Although multiple causal factors were identified for each strike, similar events were related to the dispute in each case. Among the contributing factors were union militancy, structural aspects of collective bargaining in the parapublic sector and economic circumstances. The strikes appeared to be symptomatic of a strong protest movement fostered by leaders who were committed to a union ideology. High economic demands by the union, public wage restraint policies and government intervention constrained negotiation in each case. Although professional issues were prominent in arguments underlying the dispute, working conditions and salaries also appeared to be important to nurses. The researcher projected limited change in factors that contributed to previous disputes and suggested considering alternatives to the existing bargaining procedures.

Summary

Research into decision making as defined by the studies reviewed in this chapter dates from the latter part of the 1960s. A number of the different themes were initiated in a relatively short period of time. Analysis of decision making processes, particularly at board levels, has revealed the differential roles of elected members and of the executive officers. Studies of participation in decision making generally point to a discrepancy between actual and preferred levels of involvement even when the level is already high. However, there are indications that there is an upper limit to the effective level of such involvement. The extent to which there are opportunities for involvement appear to change over time in response to changing beliefs and circumstances. Similar observations might be made about control over decision making on the basis of studies initiated in the latter part of the 1970s. At times decision making appears to be carried out in the absence of desirable information; consequently, some studies have attempted to identify methods for increasing the availability of relevant information. Possibilities for remedying the deficiency seem to reside in the use of computer technology and the development of appropriate indicators. Only a few studies have been carried out into collective negotiations, even though the first dates to the early 1970s.

9

Policy Development and Implementation

Research into policy processes revolves around various aspects of the selection of a major course of action within an organization or on the outcomes of such choices. A number of interrelated themes are used to present a review of the fifty-seven studies in this area. The first theme focuses specifically on the processes involved in identifying and resolving a policy issue while the second reflects research into the sources of influence on policies. Description and analysis of formal structures involved in policy making or planning constitutes a third theme. Studies in the fourth theme share a focus on the implementation of policies. Some of the studies focus more on the substance of policies in particular areas; these are reviewed in the fifth theme. Not all of the studies that are included have made explicit use of a policy development or implementation framework. Some of them could be categorized as research into planning or coordination; nevertheless, the similarity to studies that have used conceptual frameworks derived from the policy research literature justifies reviewing them in this context.

Analysis of Policy Processes

A number of researchers focused their studies on the resolution of particular issues as a step toward increased understanding of policy development in general. The preferred research strategy was that of the case study grounded in policy analysis concepts or models. The results of these studies relate to sub-themes such as the level of political activity, the complexity of the issue and of the process, the nature of the general approach and the relative influence of experts on policy processes.

Politics and Policy

Analyses of the processes through which policy issues are resolved have revealed that the level of political activity varies with the circumstances. Results of studies by Housego (1964) and Angus (1968) provide contrasting views of policy processes. Subsequent studies (Chikombah, 1979; Kozakewich, 1980; Sloan, 1980; Gasior, 1985) reveal the presence of relatively low levels of political activity.

A study of the resolution of a teacher training issue in Saskatchewan by Housego (1964) indicated that the decision makers acted in legitimate ways as representatives of provincial governmental and educational institutions to develop a policy on the basis of the conflict and consensus that surrounded the issue. Public officials played a key role in determining the outcome. They reacted to pressures from interest groups and were able to develop a consensus through the use of procedures that provided for negotiation and consultation. In this particular instance, the public officials were more than just brokers among competing interests; instead, they were able to determine the nature of the consensus that resolved the issue.

In contrast to the preceding results, the research reported by Angus (1968) presents a different picture of conflict resolution. The particular issue concerned where responsibility for evaluating teacher education for salary purposes in Alberta should reside: with the department of education, with the trustees' association or with the teachers' association. In this case, the efforts of other parties to mediate the conflict were largely ineffective. Although an organized negotiation model was used for analyzing the resolution of the conflict, results indicated that extra-negotiatory activity such as unilateral action, various forms of political activity and strike threat had greater impact on the outcome of the conflict than did the negotiations proper.

Results of Chikombah's (1979) study reflect a generally cooperative approach among educational interest groups in relation to the issue of funding for a teacher education practicum. Although the issue was raised by the teachers' association, the discussions eventually involved a number of additional groups. The resolution that was achieved seemed to satisfy all interests. One unanticipated outcome was that the teachers' association was brought into closer working relationships with the universities in relation to teacher education than it had been previously.

High degrees of cooperation and close relationships among groups were evident in an analysis of the extent to which the recommendations of interest groups were reflected in the policy formulations of a Royal Commission on education

(Kozakewich, 1980). This may have been due, in part, to a situation in which these groups had not expressed dissatisfaction with education at the outset. Each of the groups engaged in a variety of activities; however, the limitations of procedural requirements and political resources tended to reduce the amount of political activity. Limited political activity was also evident in Sloan's (1980) analysis of legislation that permitted private and public school authorities to enter into agreements for provision of educational services. Political resources were not used even though they might have been available. Although those who were opposed to public aid to private schools had high latent influence, they made less use of political channels than did those who favored such aid. The influence that the opponents did try to exert was channeled through the bureaucratic structure. Perhaps the reason for the limited political activity was due to the prediction by the opponents that the outcomes would be largely symbolic and that opposition would not reflect favorably on those who expressed this openly.

Gasior (1985) conducted a study to describe the political activities of school boards in relation to the approach of a provincial government to consolidating school law. An analysis of the activities of sixteen school boards revealed only a minimal amount of political activity. Degree of political activity appeared to be associated with size; larger boards were more active than smaller boards. Although these boards tended to communicate demands and supports as well as to articulate interests, the actual influence on the development of the Act was negligible. Boards were dissatisfied with various aspects of the legislation but did not express this through political activity.

Complexity

Several studies of curriculum development, based on an explicit or implicit policy framework, have indicated that this form of policy development has at times been protracted and complex. This was evident in the process through which a social studies program was developed in Alberta (Korteweg, 1972). The process was influenced by individuals who had commitment and prestige; cooperation among influentials at the provincial, university and school system levels ensured that those who were eventually responsible for implementation were in support of the proposal. Similar results were reported by Mosha (1979) in a study of the development of curriculum in language arts from a policy perspective. Although the policy making took the form of centralized action, the process changed over time in the direction of broadened participation and increased reliance on the knowledge of those who had expertise in the area.

The complexity of the issue emerged as a key element in understanding the resolution of the credit transfer issue among postsecondary institutions in

Alberta (Long, 1979). An issue such as transfer of credits raises questions about mandates of various institutions, about status and about autonomy. The structure and policy of government, the climate of opinion, and in particular the availability of political resources, appeared to be important factors in explaining the outcomes of the controversy.

Both issue and process complexity surfaced in the analysis of events that resulted in the establishment of the University of the Azores (Alves, 1985). The analysis revolved around antecedents and environmental factors, demand articulation, political interests, actions and consequences. An institution of higher education was a long-standing aspiration in the Azores. Ideological differences between the Azores and Portugal, together with the desire for Azorean self-determination, created tensions that were reduced by the decision to create the University. The researcher concluded that the policy was an act of political expediency.

Complexity was evident also in the evolution of a policy on school closure over a four-year period in a rural school jurisdiction (E. C. Allen, 1985). During that period, the board engaged in numerous activities which included establishing various committees, commissioning a study and holding public meetings. A major reason for the protracted process was the lack of a clearly defined problem in the early stages; consequently, the definition changed as time progressed. Agreement on a policy finally resulted from a substantial amount of public pressure.

A study by Bohac (1989) on the process through which a department of education changed its orientation from an emphasis on regulations to an emphasis on results or outcomes of the educational system also illustrates the complexity of both the issue and the process. Results indicated that the idea of a new management and finance plan was developed because the originators provided initial commitment to the project, the plan was not resisted by school boards, and the general thrust was compatible with public opinion. Both the key actors and the roles of actors changed during the process. Similarly, the plan was shaped by both the external and the internal context of the department. Through the process a vague concept was refined and developed into a more complex plan than was originally envisioned. A broad range of factors influenced the policy, but the intent of the shift from a regulation-based to a policy-based orientation was achieved.

Approach of Policy Makers

Although the preparation of a major item of legislation such as a revised school act can be regarded as a major form of policy development, the process may not include those elements that are usually associated with policy formation. Stringham (1974) analyzed the writing of the Alberta School Act, 1970, within a theoretical framework for understanding the process of public policy making. The researcher concluded that an incremental approach had been used intuitively and that there were few similarities between the theoretical framework and the process because there had been no attempt to develop explicit policy statements.

In contrast to the preceding study, Seguin (1977) concluded that openness and creativity rather than incrementalism characterized the approach taken by policy makers in the development of the Early Childhood Services program in Alberta. Although the planning and decision making were dominated by government, there was considerable involvement by interest groups, particularly professional educators, in the earlier phases. The opportunities for involvement and the openness of government to the perspectives introduced by the advisory committee contributed to a broadened consideration of alternatives.

Politics and Expertise

Analyses reported previously have alluded to the roles played by educators, government officials and elected policy makers in various decisions. The general issue was addressed conceptually by Kunjbehari (1981) and emerged as a significant aspect of an empirical study by Fennell (1985).

Involvement of both experts and politicians in the formulation of policy has implications for the type of model adopted for analyzing the process. Kunjbehari (1981) developed such a model and applied it in the analysis of policy formation at a district level. The model represented the process in five distinct stages and included three components: rational, political and rational-political. In comparison with other models, this one appeared most useful for analyzing a process that actively involved experts and politicians.

Fennell (1985) analyzed the political decision making process involved in determining a statement on the goals of basic education adopted by the Alberta Legislative Assembly in 1978. The key decision makers were members of the Legislative Assembly and representatives of the Department of Education. Governmentally established curriculum boards were the major arenas for the interaction of groups, associations and agencies. The views expressed by the business community and by curriculum boards on goals and priorities were highly influential. Although the final decision was made by the legislators, the Department controlled the information base for proposal development. Members of the government regarded educators as having too much power; however, other groups and individuals also had direct influence on government.

Influences on Policy

Many of the preceding studies made indirect reference to influences on policy processes; others identified more directly general sources of influence on the nature of policy outcomes. Among these influences are factors related to the political and cultural context, the information available to policy makers, the attitudes and beliefs of participants in the process, and the general model or perspective that guides the planning process.

Cultural and Political Factors

Ways in which environmental and structural factors may influence policy was illustrated by the results of the analysis of the content of parliamentary debates on the subject of federal financial participation in education (Toombs, 1966). The debates placed the issue in the context of other issues such as the constitutionality of federal participation, minority rights, the development of human potential, equalization of educational opportunity and expressions of nationalism. The political party affiliation, region represented and religion of the legislator bore some relationship to the policy advocated. In view of these constraints and considerations, the researcher concluded that the future resolution of the issue lay more in fiscal arrangements between federal and provincial governments and less in direct grants to education.

The influence of cultural factors proved to be important in understanding an apparent contradiction in the development of secondary education policies in Iceland (Hansen, 1987). A bill designed to reorganize the secondary school system along comprehensive lines failed to receive passage six times in a seven-year period. The contradiction resides in the observation that during this same time, many of the policy ends proposed in the legislation actually were implemented. Resistance to this legislation in parliament seemed to be rooted in the perceived undermining of historical elements, cultural traditions and fundamental values. A second problem with the legislation was the overemphasis on specification of curriculum format rather than on the aims of the reorganization within a changing socio-economic context. In the absence of such a rationale, the program diversification and early specialization in the reorganization suffered from a "legitimation problem."

Information

The extent and nature of the influence that information available to policy makers and to interest groups may have on policy development was examined in two studies. In the first, Berghofer (1972) used an experimental approach to study the effect that exposure to literature on futures research has upon those engaged in developing educational policy. In the second, Fisher (1988) explored the relationship of the print media to policy making with respect to a specific policy issue.

The design of Berghofer's (1972) study involved subjecting three groups to different levels of exposure to information about possible futures. A modified Delphi technique was used in data collection. Results indicated that the groups given the greater exposure to futures material manifested the greatest tendency to propose alternatives to present practice. The groups that received futures material were also more willing to change opinions and were less likely to be influenced by majority opinion. Both providing information about the future and the Delphi process appeared to have practical application to participation in the policy making processes.

Fisher's (1988) case study revealed that media coverage of the specific issue was extensive but somewhat superficial. Conflict was the most important criterion for coverage; reactions by the parties to each other's comments ensured media publicity. Journalists were not proactive in investigating stories but tended instead to rely on events and secondary sources for news material. Although general coverage was balanced, bias was evident in individual news items. The researcher concluded that the impact of the media on policy makers was mediated by group members who were influenced more directly by news reports. Individual and group pressure on legislators was more influential in shaping policy than was media coverage. The identification of interest group positions was a more significant aspect of media coverage than was identifying problems and suggesting solutions.

Attitudes and Beliefs

Indications of the importance of attitudes and beliefs for policy development emerged from studies related to the integration of special students (Barron, 1979), policies to reduce unemployment (Faulk, 1987), and student and parental rights (Gour, 1988).

Barron (1979) investigated the attitudes of members of major interest groups towards the school placement of exceptional children. Members of all groups agreed that those with severe exceptionality should be segregated into special campus-type schools. However, there was considerable disagreement as to the placement of mildly exceptional children. In general, the higher that members of groups were rated on knowledge of special education, the more they favored integrated placement. There were some differences between groups; university faculty and school superintendents were more favorable to integrative placement than were special education teachers.

The attitudes and beliefs about unemployment held by two significant sets of decision makers were the subject of Faulk's (1987) study. In the first set were policy makers responsible for manpower policies while in the second were "gatekeepers" who influenced access to training programs, specifically counsellors and aides at two vocational centers. Results of analyzing interview data revealed a high degree of similarity in beliefs within groups and major differences between the two. Both groups tended to attribute causes of unemployment to individuals. However, policy makers believed that increased training could reduce unemployment while counsellors emphasized psychological counselling to change personal attitudes. Analysis of quantitative data suggested that skills training programs appeared to be relatively ineffective in changing employment prospects. In general, results suggest that prevailing attitudes may limit the consideration of policy alternatives.

Gour (1988) used a survey design to determine the extent to which the beliefs of school authorities regarding rights and freedoms of pupils and parents were in accord with the principles enunciated in the *Canadian Charter of Rights and Freedoms*. Teachers, principals, superintendents, department of education officials and trustees demonstrated an intrinsic sense of fairness and justice; however, this may not ensure that the values would be applied to specific cases. Respondents tended to react defensively whenever their rights to make decisions favoring the collective majority appeared to be challenged. Although most supported the concept of equality rights, they were less prepared to support the rights of parents to request programs to accommodate special needs of children. Cost was a factor in the extent to which language rights or opportunities were to be recognized. In general, principles were supported more strongly in the abstract than in concrete application.

General Perspective

Attention has also been given to the general perspective, model or paradigm that guides the policy development or planning process. As a result of contrasting two approaches to planning -- that of the Alberta Commission on Educational Planning and that reflected in the writings of Freire -- Moore (1973) concluded they were based on very different perspectives. The two approaches reflected what the researcher termed a system model and a political model, respectively. Essentially, the system model of the Commission on Educational Planning was characterized by an emphasis on individual response to change, on managerial aspects of education, on economic criteria and on relatively low participation. In the political model that guided Freire's analysis, the emphasis was placed on structural change, on teaching-learning processes, on non-economic criteria and on a relatively high degree of participation in planning. Results of the analysis suggested that the outcomes of the planning or policy development activity is influenced by the general perspective of those who control the process.

Planning and Policy Structures

Studies of structures for policy development have tended to be oriented toward either planning or coordinating functions. The units or agencies, at both organization and system levels, that have been studied were implicitly if not explicitly associated with the functions of either participating in the development of policies or in their execution.

Organization Level Structures and Processes

Policy making structures have been examined within colleges, a university and technical institutes. The purpose of a study by Day (1971) was to examine the extent of administrator-faculty conflict regarding the distribution of control over policy formulation in six colleges. In a related study, N. W. Clarke (1977) explored a dual structure concept in the design of a college. The focus of a study by Taylor (1980) was on the structures that develop within a university in response to particular environmental stresses. Glanville (1986) analyzed two cases of policy setting at each of two technical institutes in order to compare policy formulation under two types of governance structures.

Administrator-faculty conflict in relation to the distribution of control over policy formation varied across six colleges (Day, 1971). Generally, administrators perceived less conflict and greater participation than did the faculty members; both faculty and administrators favored greater faculty participation in policy formation than actually existed. Presumably, the development of structures that facilitated this participation would be welcomed by both groups. On the basis of exploring a dual structure approach to the organization of a college, N. W. Clarke (1977) concluded that the using the model of a policy development and a policy implementation structure showed some promise. An analysis of tasks to be performed rather than detailed goal-setting seemed to be a practicable point of departure for making decisions on organizational structure. Results suggested that there were at least short-term benefits to a consensus form of policy development.

As a result of a case study conducted in a university, Taylor (1980) concluded that in such a setting policy making can best be viewed as carried out in a network of "systems." These systems consist of actors and issues, tend to be temporary and respond to particular stresses in the environment. Each of these policy making systems may be viewed as a network of actors who, in interaction with the environment, progress toward a policy goal that is only vaguely defined. The extent to which such a fluid situation lends itself to formalization is problematic.

One of the technical institutes in Glanville's (1986) study was governed by a board while the other was under provincial administration. Results of analyzing the cases indicated that the nature of the policy setting process was influenced strongly by the type of governance structure. A stable structure in support of policy making, which was an integral part of the senior level of administration, was evident under board governance. In the institute under provincial administration, there were two different policy making structures each of which was temporary in nature.

Research into planning processes at organizational levels -- specifically, colleges (Knapp, 1991) and a university faculty (Wang, 1991) -- has been conducted from a strategic planning perspective. The general concept of strategic planning includes such aspects as attempting to assess the future, determining desired goals in the context of that future, developing alternative courses of action and selecting a desired course of action. Environmental scanning and issue identification are more specific aspects that precede action planning.

Within a sample of colleges, the major forces that prompted planning were internal rather than external (Knapp, 1991). In particular, there was a low level of environmental scanning and limited response to environmental change. Mission statements did not hold high significance, and alternative strategic options were not formalized. Planning was constrained by the annual nature of the budget process. Presidents played a key role while committees fulfilled a coordinating function. Although the process was participative, feedback to participants was limited. In general, the process lacked a number of important aspects of the strategic planning model.

Wang (1991) also concluded that a planning project in a university faculty was characterized more by traditional planning than by the concept of *strategic* planning. The reasons for initiating the planning project included serving as an impetus for change. A structure which included two coordinators, outside experts, study teams and task forces was established. The major processes included literature reviews, interviews, surveys and meetings to discuss reports. The researcher concluded that the model was more traditional than strategic because political support was not developed within the context of the faculty, participation declined during the extended process, and the institutional culture was not supportive of strategic planning. At the time of the study, action planning was in progress, but members of the faculty did not anticipate any major changes as a result of the project.

System Structures

Research into system-level structures has included three studies on planning and coordinating higher education development. In the first of these, Maddocks (1972) conducted a descriptive-comparative study of four postsecondary coordinating agencies. The evolution of interprovincial coordination of university development in the Atlantic provinces during the 1960s was investigated by C. R. Clarke (1975). In the third study, Ume (1977) investigated the coordination of university education in Nigeria.

Two of the coordinating agencies investigated by Maddocks (1972) were advisory to government and two were intermediary between government and the institutions. Results indicated that the advisory structures were more influential than the intermediary ones. Both types of agencies were more successful in distributing grants than in rationalizing program development. None of the agencies had formulated plans for the rationalization of programs. C. R. Clarke (1975) found that government participation in coordination -- that is, in cooperative policy development -- was encouraged by the increased demands for financial support and by the relatively large number of universities in an area with limited population. In spite of the general support for coordination, the coordinating agency was confronted with some major issues in relation to reconciling regional and provincial priorities as well as interprovincial differences in policies.

A similar problem was identified by Ume (1977) in Nigeria. Rational policy development had been hindered historically by pressures of local interests and the absence of central agencies. At the time of the study, central agencies had been established; however, they continued to face pressure of local interests. These circumstances reflected the broader public policy making arena in which a federal structure allows for emergence of regional rather than national policies. In view of the persistence of regional interests, the researcher was only cautiously optimistic about the prospects of central coordination.

Two different perspectives on educational planning at a system level are provided by studies of planning processes in Alberta and Cameroon. The structures for educational planning in Alberta were examined by Keoyote (1973) and later by Okello (1979). In the early 1970s there were no formalized planning structures at the Department level, and planning could be described as reactive and incremental. The Commission on Educational Planning used task forces, submissions, hearings, conferences and research to assess future needs. The Cabinet Committee on Education monitored reactions and subsequently made decisions (Keoyote, 1973). Sometime after the Planning and Research Branch of the Department of Education was established, Okello (1979) concluded that the major orientation was toward short-range planning. Studies tended to be internally-initiated and screened to meet political ends. Public involvement was limited to service on advisory committees.

Ojong (1983) described the educational planning process at the national level in Cameroon as reactive, a response to conditions in the environment of education. A reason for this may have been the emphasis placed on education as a key factor in economic, social and cultural development. The conventional stages of educational planning were followed, but the technical aspects were limited. Both local and national level structures were involved in planning. Actors in each structure reflected various aspects of the society; however, teachers, students and parents were not represented. In the process, politicians exercised more influence than did technocrats. Among the obstacles to more effective planning were lack of adequate statistical data and of trained personnel, lack of effective coordination of planning activities and low priority on planning-related research.

Policy Implementation

Studies of policy implementation have focused on that phase of the policy process following the taking of a major decision, even though it may at times be difficult to draw a sharp line between development and implementation. Results of these studies have generally drawn attention to successful, mixed and uncertain implementation. In relation to each of these outcomes, the studies have identified important contingency factors in the implementation of policies.

Implementation Success

Three studies on policy implementation achieved what might be classed as a fair measure success. The purpose of a study by Bryce (1970) was to review federal legislation relating to vocational training with particular reference to the Canadian Technical and Vocational Training Assistance Act of 1961-67. Small (1980) conducted an analysis of the policy to establish a distance education university while LeTourneau (1981) examined the establishment of a French language teacher training institute in Manitoba.

Failure to forecast accurately the consequences of a policy and the absence of complex arrangements may have resulted in the apparent success of the federal involvement in technical training from 1961 to 1967 (Bryce, 1970). Although precedents for the involvement had been established over more than fifty years, some new provisions -- open-ended, shared-cost arrangements -- resulted in rapid development of technical education and in an unanticipated high level of expenditure. The researcher speculated that these and other experiences would probably inhibit the future use of open-ended, shared-cost programs.

The probable success of different policy implementation strategies is likely to be contingent upon the nature or the type of policy. Although Small (1980) did not develop the implementation aspects, he did discuss three types of policies in relation to the genesis and evolution of Athabasca University: bona fide, expedient and appeasement. Bona fide policies were characterized by candor, honesty and scrupulousness; expedient policies were pragmatic and contrived. The appeasement policies were characterized by moderation, mollification and conciliation. As is evident in the descriptions, implementation feasibility was probably in the minds of policy makers when some of these policies were being formulated. The University was finally established after the development went through stages of euphoria, moratorium, acceptance and endorsement.

Another successful case of policy implementation was described by LeTourneau (1981) in relation to the establishment of a French language teacher training institute. Results of the analysis indicated that among the critical factors in the success were the creation of a specific agency to facilitate implementation, the building of a supportive coalition, the employment of persons committed to the policy and the allocation of financial resources to aid implementation.

Mixed Outcomes

A number of implementation studies in the general area of education suggest that success was varied or mixed. In one of the studies placed in this category, Nussbaumer (1977) examined the relationship between the recommendations of a commission report and subsequent developments in policies in relation to postsecondary education. Tymko (1979) investigated the implementation of the accreditation policy that replaced external examinations in Alberta in order to determine why the consequences were other than had been anticipated. A series of questions revolving around the implementation of policy on teacher evaluation guided studies by Burger (1988) and by Knight (1991). The purpose of a study by B. L. Bosetti (1990) was to conduct a detailed investigation into how a curriculum policy initiative was transformed into action.

In analyzing the trends in policies and structures for postsecondary education, Nussbaumer (1977) found that recommendations relating to the reorganization of programs and agencies received more support than those for consolidation. Changes in policy were made only in areas where there were perceived to be problems; even in these areas the time to implement changes seemed to be about five years. In other areas there was no clear distinction between policy development and implementation. The report of the Commission served to publicize developments that were already underway, and to some extent, served to symbolize government responsiveness to the public.

On the basis of his investigation of the implementation of the accreditation policy, Tymko (1979) judged the outcomes to be a "mixed success." The particular outcomes of the policy were explained, in part, by the lack of congruence between the issue, the policy instruments and the implementation strategy. In particular, the researcher concluded that those who were responsible for implementation did not establish an organizational strategy which supported the policy, did not assess the state of agencies responsible for implementing the policy and did not provide appropriate structures.

Burger's (1988) study of teacher evaluation policy focused on the degree of policy adoption, the events that influenced policy adoption and the variables influencing policy implementation. Indications were that even though the development and adoption of local policy on teacher evaluation was mandated in 1984, the evolution of policies in the area had occurred over a much larger time span. The implementation of policy was accelerated by a specific event involving the decertification of a teacher. Involvement of teachers in the design of teacher evaluation policy at the local level had limited impact on the process. The motivation to implement teacher evaluation was stronger at provincial than at local levels. Most administrators were prepared to accept a superficial definition of full policy implementation mainly because of the mandatory nature of the policy. Inadequate resources to conduct teacher evaluation appeared to be a major impediment to policy implementation.

The implementation of the teacher evaluation policy was described by Knight (1991) from the perspectives of two principals. Results indicated that the experiences of the principals could be understood best within the context of the larger organizational framework beyond the school. The two principals differed in their understanding of the context, in the interpretation of the policy and in their personal beliefs and values. The similarities and differences were evident in the way that the two principals interpreted the policy, in the nature of the contextual factors that influenced them and in their preferences. On the basis of the results, the researcher proposed that policy implementation is a complex process and that implementation will encounter difficulty if the values implicit in the policy differ from those held by the implementers.

Two main perspectives were included in the study by B. L. Bosetti (1990) of curriculum implementation: the actions taken at the upper levels of the provincial educational system intended to facilitate implementation, and the factors that influenced educators at the local level to become involved in early implementation. The Department attempted to foster a team approach that involved activities designed to promote an understanding of the philosophy and goals among prospective implementers as well as to expand skills and knowledge among teachers and administrators to facilitate implementation. A variety of contextual factors specific to particular schools and administrators' attitudes toward curricular change influenced early implementation decisions. Those who decided to become involved had a positive attitude toward change and worked with teachers to plan the change. Among the broader environmental conditions that influenced decisions were economic, social and political factors related to budgetary constraints, economic uncertainty and uncertainty about the direction of educational policy. The researcher concluded that a major obstacle to policy implementation was lack of accurate and current information about goals and about how the policy fits into the larger picture of educational reform.

Uncertain Implementation

Three studies of policy implementation that have been associated more closely with problematic outcomes involve government agencies and programs. Studies by Colvin (1975) and by Gaffney (1987) related to workforce training policies while the third (Zolf, 1984) related to policy in the area of broadcasting. A study by Guillemin (1990) focused on the implementation of training standards for nurse administrators.

The negative impact of governmental structures on implementation of policies was indicated in Colvin's (1975) analysis of how federal and Alberta manpower policies were expressed as training programs. Results indicated that various government departments at both levels were involved in program implementation. Identification, selection and counselling of clients were inhibited by the lack of coordination among these different departments. In addition, the complexity of financial arrangements appeared to limit the effective implementation of programs. Gaffney (1987) used a policy monitoring approach to study the causes and outcomes or consequences of a federal government strategy for financing a number of programs in which there was some alternation between employment and education or training. The specific nature of the financial support varied across the six programs. Results indicated that the policy was based on conflicting motives which resulted in tensions. The tensions were evident in the interactions among the implementing organization, the stated policy, the target groups, environmental factors and actions at the policy making level. Government action tended to shift between conflict management and delivery of service, or reflected both simultaneously. Some of the less rational characteristics of political systems were evident in the implementation of the policy.

The evolution of policy on educational broadcasting at the provincial level was investigated and described by Zolf (1984). Educational broadcasting overlaps two areas of jurisdiction, namely, that of the federal government for broadcasting and of provincial governments for education. A compromise solution negotiated between the federal and provincial governments provided for authorizing the licensing of provincial educational authorities that remained under the jurisdiction of the federal government. The vagueness of the legislation resulted in a struggle between two structures created by the Alberta government in the educational broadcasting area. One was a Corporation which satisfied the federal government's requirement of "independence" and the other was the Authority which was the government's link with the Corporation. A struggle ensued as the Authority attempted to define the content of educational programming while the Corporation attempted to emphasize its independence. A change in structure removed the adversarial relationships with government; however, the funding procedures of educational programming raised questions about the degree of independence. In general, the study yields insights into the dilemmas associated with reconciling federal and provincial policies.

Factors that might influence the implementation of recommendations relating to the role of and standards for nurse administrators were investigated by Guillemin (1990). Concern about the role and preparation of nurse administrators dates to the 1950s. The most recent impetus for establishing standards was the 1988 update of a 1983 position paper of the Canadian Nurses Association. Nurse administrators who comprised a policy Delphi panel identified governance factors, followed by political, implementer and economic factors, as likely sources of influence on the implementation process. Chief nurse administrators were considered by the panel to be the primary factor because of the potential to act as change agents. In order to realize this potential, the nurse administrators will require both credibility and implementation skills. Unresolved issues relating to the professional domain of nursing, creativity in resource priority setting and health consumer expectations were likely to have an influence on the degree of involvement of chief nurse administrators in the implementation of the standards.

Analyzing Issues and Alternatives

Most of the studies reviewed in the preceding sections involved either an analysis of policy processes or of policy implementation. To a large extent these have been retrospective. In contrast, some research has adopted a prospective stance to identify factors that are likely to impinge on future policy development or have actually involved the analysis of a policy issue. These studies are reviewed under the headings of environmental factors, the analysis of issues and policy alternatives.

Environmental Factors

In the first of two studies on environmental factors based on a Delphi procedure, Barrington (1980) identified factors that are likely to have an impact on the development of policy in community colleges. Using a similar research strategy, Sellinger (1984) examined forces that were expected to have an impact on certain university departments.

The results of Barrington's (1980) study indicated that political forces were perceived as the most prevalent but that the economic forces were considered to be the most important. These general forces were expected to be experienced by the colleges as demands for flexibility and accountability. Economic forces were also evident in the second study. Monetary factors, internal operations and computer technology were identified as forces most likely to have an impact on universities, particularly on admission to programs (Sellinger, 1984). Declining financial resources were the focus of options for dealing with challenges. The response tended to emphasize the need to reduce time commitments and to increase revenue. Possible adjustments for universities that the researcher deemed to be rational were increasing cost-effectiveness of programs through reorganization, development of systematic means for distributing resources and relating the demand for resources to increased quality of service. In general, a convergence of administrative practices in universities with those in the public and private sectors was anticipated.

Analysis of Issues

Policy Delphi studies have also been conducted to analyze particular policy issues. In the first of these studies, Steier (1985) identified changes in education that were both probable and possible through the continued introduction of computers; potential patterns for arriving at a desired future were also explored. Subsequently, Tunstall (1988) examined important program issues emerging in the British Columbia college system and strategies that might be used to address high priority issues. Richardson (1988) involved stakeholders in exploring the issue of articulation of nursing education programming as one way to work toward the requirement of a baccalaureate degree as a prerequisite for entry to practice.

The panel of eighteen individuals who had a background in education and were knowledgeable about computers in the Steier (1985) study identified a variety of developments that were either a reaction to technological change or part of a continuing technological experiment. Among the probable but undesirable elements were underutilization of equipment, lack of appropriate software, confidentiality and equity problems, and resistance to change. The probable and desirable developments included emergence of a local software industry, an awareness of the social impact of computers and increased parental involvement in school matters. Potential patterns for achieving a desired future state would likely be influenced by the extent of software development and evaluation, levels of funding, inservice education, and communication among organizations and stakeholders.

The panel in Tunstall's (1988) study consisted of ministry officials, chief executive officers of colleges and senior instructional administrators in colleges. Major issues faced by colleges, in the view of the panel, were related to areas such as computers, student access, employment markets, faculty retraining and renewal, funding and technological change. Nearly all of the issues had system-wide relevance. The researcher concluded that the college system was experiencing a high level of uncertainty without a clearly articulated policy framework to guide development. Colleges were attempting to respond to changing demands in the absence of a clearly articulated program approval process. An examination of the issues revealed that technological changes were having a significant impact on programming.

Richardson (1988) defined program articulation in terms of transfer from one level of programming to another without loss of time or credit. An analysis of historical data revealed that the articulation of nursing education programs first appeared in the mid-1970s, was supported by government and nurses' associations for different reasons and existed in two different forms at the time of the study. The majority of panel members considered the objective of baccalaureate entry into practice as desirable and feasible. Three of thirteen programming alternatives were considered to be desirable; two of these represented articulated models. In addition, articulated models were evident in nine of thirteen feasible alternatives. The researcher concluded that nursing programming articulation was a viable way of working toward baccalaureate entry into practice under the existing structure of nursing education.

Policy Alternatives

Unlike studies that focus on the analysis of existing policy issues, some research has been conducted in areas of emergent issues or in areas were a policy initiative is deemed advisable. Duncan (1986) based his study into policy on administrator training on a rational model of policy development. A study by Bottas (1988) was designed to provide information intended for use in policy development in relation to high technology learning experiences for physically disabled adults. Maynes (1990) conducted a study that focused on the early stages of policy making in relation to a particular issue, schools and poverty in urban areas. A prospective policy analysis of degree granting in colleges was conducted by H. L. Montgomerie (1990).

The specific focus of the Duncan (1986) study was to develop policy recommendations that would serve the objective of supporting the development of an adequate pool of educational administrators for Alberta. The general research strategy involved exploring issues and alternatives in the literature and through interviews with representatives of major stakeholder groups. Five policy recommendations were proposed which were presumed to meet the criteria of potential effectiveness, acceptable efficiency, political feasibility and ethical appropriateness. The general thrust of the recommendations directed at government included convening a meeting intended to facilitate coordination of professional development opportunities, commissioning preparation of a monograph helpful to boards, and requiring school boards to have explicit policy on administrative appointments and enhancement of performance. Universities were urged to conduct program reviews and to determine the demand for professional development of administrators within their respective service areas.

On the basis of interviews with physically disabled adults, significant others in their lives and experts in physical disabilities, Bottas (1988) developed a series of propositions. The propositions suggested that existing programs and services were inadequate, that there is a range of requirements, that regular programs are preferred, and that special purpose administrative units and service units may be required. The proposition were used as the basis for indicating the substance of the policies intended to advance programming in high technology for physically disabled adults.

Maynes (1990) designed a study to examine the extent to which urban poverty presents issues that are likely to be considered in policy making at a district level. Results indicated that major stakeholders -- principals, senior district administrators and trustees -- had constructed different social realities relating to poverty and education. The working hypotheses based on the results of the study suggested that educational poverty policies were not likely to be developed in the foreseeable future. Only the knowledge bases of principals was favorable to the development of appropriate policies while those of senior administrators and trustees were unfavorable. Knowledge of social strategies with potential to address poverty-related issues was generally lacking. None of the stakeholder groups perceived significant political will to initiate policy making in the area.

The policy issue of extending degree granting authority to community colleges was the focus of H. L. Montgomerie's (1990) study. Representatives of the major stakeholders -- colleges, universities and a government department -- were interviewed, and documents were analyzed to identify preferences and alternatives that could serve as the basis for a policy decision. Results of the data analysis confirmed that access to university programs was a significant policy issue; however, authorizing community colleges to offer degrees was not viewed either as a preferred or as a feasible solution. Although provision of complete undergraduate degrees was desirable and feasible for some colleges, the preferred solution was joint college-university programs. The basic plan would involve colleges offering the first two years of programs while the universities would offer the final years and award degrees.

Summary

Although sharing some common features, the studies into policy processes are also varied. Some have focused on the antecedents to a policy decision in an attempt to explain why a particular issue was raised and why a particular alternative was selected. Other studies have taken the process through which an issue or conflict was resolved as a way of exploring how policies are formulated, while still others have focused more on the process of implementing a policy once the major choice has been made. The structures established for the formulation of policy on a more or less continuing basis have also been investigated. The emergence of various themes in policy research reflects an evolution of interests. Although the initial studies into policy processes and influences on policy were conducted in the mid-1960s, these themes received concerted attention only in the 1970s and 1980s. Research into policy implementation and into structures began in the 1970s while the analysis of policy issues received attention primarily in the 1980s.

The results of these studies indicate that policy development and implementation processes are complex and are influenced by various situational factors including the nature of the issue, the involvement of interest groups, the characteristics of decision structures and the availability of resources. Some of the studies have found relatively low interest or limited conflict among potentially competing groups. The ability of agencies established to engage in coordinating and planning functions to promote rational policy development and implementation is also limited. Policy implementation is more likely to be successful if the implementation strategy selected is appropriate to the environment, if suitable structures are developed, if committed people are involved and if there is support from higher authority levels for the policy.

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Summary and Discussion

A review of this particular set of doctoral theses leads to some general observations about the nature of the research as well as about trends over time. The sections of this chapter contain a summary and discussion of both the methodologies and the substantive areas of research. Some thoughts about possible future directions in doctoral research prompted by the review are included in the discussion.

Characteristics of the Research

Identifying an appropriate basis for describing the nature of the research conducted by doctoral candidates proved to be more challenging than was anticipated. Although the established approaches to discussing research methodologies offered numerous alternatives, no single one was sufficiently comprehensive for the type of description desired. A multidimensional perspective was required. Accordingly, a classification scheme that involved three dimensions or sets of categories was developed. Each thesis was categorized according to the goal or purpose of the study, the general research strategy and the data collection methods. A summary of the characteristics of the research in terms of these dimensions also serves as an indicator of the usefulness of the classification scheme.

Goal or Purpose

With respect to the first basis of classification, six possible purposes of research projects were used to establish the categories: (a) to describe a process, organization or other phenomenon; (b) to determine relationships between or among variables; (c) to assess the consequences, outcomes or effects of certain practices; (d) to develop a new program or administrative procedure; (e) to test or develop a theory or model; and, (f) to develop or test the applicability of a research technique. Studies were classified as being descriptive, relational, evaluative, developmental, conceptual or methodological in terms of the primary purpose or goal. Since some studies addressed more than one purpose, combined types such as descriptive/relational were also included among the categories. Eleven categories, single and combined, were required to classify the 330 theses.

Although there is diversity across the theses, most of the studies were oriented primarily toward description and toward the examination of relationships among variables. In general, the main purpose of the research appears to have been to increase knowledge about current practices and about the ways in which different aspects of administrative structures and processes are interrelated. Neither the evaluation of current administrative practices nor the development of alternatives received much attention in this set of doctoral studies. Similarly, only a limited amount of the research was oriented toward developing new conceptualizations, testing models and theories or explicitly examining new research methods. Although various studies yielded insights into conceptual or methodological aspects, or provided the base for evaluative observations, relatively few studies addressed these goals to a sufficient degree to warrant placing them in the particular categories.

Given the constraints under which doctoral research is conducted, the emphasis on descriptive and relational studies probably is to be expected. However, the presence of some studies that serve other purposes suggests that the constraints need not act as insurmountable barriers. Successful completion of these other types of studies prompts the question of whether there is potential for more research in these categories in future. If research in educational administration were to become oriented more toward improving practice, then the evaluation of existing programs or policies would seem to be an appropriate focus for doctoral studies. A similar observation might be made about developmental research; more attention might be directed toward developing innovations that have administrative or educational application. The limited number of conceptual or methodological studies also seems inconsistent with the needs of a developing field of research. The potential of doctoral studies to contribute to research in these areas merits further consideration.

Research Strategies

Another dimension of the classification scheme relates to the general strategy adopted for seeking answers to research problems. A research strategy is a general methodology or "design" selected for achieving the purposes of a study. Seven strategies were defined: survey, case, case/survey, comparative, experimental, panel and causal-comparative. Definitions of the strategies are generally consistent with those in the literature. Perhaps the only two that warrant clarification at this point are the case/survey and panel strategies. The former involves using the approach of a survey to collect data in relation to one particular organization or in a limited number of sites while the latter involves collecting data from the same respondents at successive intervals. Some strategies received only limited use; the minimum frequency associated with any particular strategy was three. Only ten of the 330 theses could not be placed into one of the seven categories established for research strategies.

The variety in research strategies used in the theses was limited; survey research and case studies were predominant. Only a few of the studies used case/survey or comparative strategies; even fewer used causal-comparative, experimental or quasi-experimental designs. Given the nature of the research problems that are likely to be addressed in educational administration, the limited number of experimental or quasi-experimental studies is to be expected. Perhaps that there are any at all is noteworthy. The limited number of comparative and ex post facto studies may reflect the constraints under which doctoral research is conducted to a greater extent than any restrictions placed on the strategy by the nature of the research problems. Nevertheless, the potential of comparative studies, given the variations in educational and administrative practices, warrants consideration in future. Similarly, ex post facto strategies may hold potential for focusing problems that tend to have been addressed more generally through survey strategies.

Data Collection Methods

Methods or techniques of data collection formed the third basis for classifying the theses. Five main data collection techniques or sources -- questionnaires, interviews, documents, observations and records -- were used either singly or in combination in the doctoral studies. Within the application of specific techniques, there was considerable variation. Questionnaires, for example, covered the range from published instruments through to those developed by the researcher. Both interviews and observational methods varied widely in the degree of structure. Documents as data sources ranged from published reports through historical documents to minutes of meetings. Records included various forms of stored quantitative data from computer files to statistical reports.

The major methods of data collection in the doctoral theses involved use of questionnaires, interviews and document analysis followed at some distance by observation and examination of records. Among multiple methods, documents/interviews and interviews/questionnaires were used most frequently followed by documents/interviews in combination with either questionnaires or observation. Noteworthy in relation to the nature of the data collection techniques is the extent to which researchers have used qualitative data as well as the extent to which analysis based on both quantitative and qualitative data has been used to address particular research questions. Evidently, some of the more fundamental issues associated with quantitative and qualitative research have not posed major problems for researchers who have used both types of data in a single study.

General Characteristics

As may be apparent from the preceding discussion, the three dimensions of the classification are not entirely independent. The classification based on purpose overlaps to some extent with that based on research strategy; some purposes are more compatible with certain strategies than others. For example, an experimental research strategy is likely to serve the purpose of exploring relationships while case studies are likely to involve description as a major purpose. In other words, purpose is implicit in certain types of research strategies. Similarly, certain methods of data collection are implied by the purposes and general approaches to conducting a study.

When purpose of the research was considered in combination with the research strategy, the majority of studies fell into one of four combined types: descriptive case, descriptive/relational survey, descriptive survey and relational survey. The combined types were associated with particular data collection methods. Descriptive case studies tended to involve interviews, documents and observations in data collection. Descriptive surveys and descriptive/relational surveys relied primarily on questionnaires but also on interviews to a limited extent. In relational surveys data were collected primarily through interviews and questionnaires, but other sources such as documents and records were also used.

Although there is a measure of diversity along various dimensions, the doctoral theses reviewed seem to be dominated by two major models of research. The first model supports studies that focus on relationships among variables, involve survey strategies, rely on questionnaire methods of data collection and subject the data to quantitative analysis. The second model promotes studies that describe a particular area of interest or series of events, involve case study strategies, use documentary and interviews data sources, and analyze the data through non-quantitative methods. Some of the variations in the research reflect a blending of certain features of the two models such as when surveys are used to generate descriptions or when questionnaire data in relational studies are supplemented by interview and documentary data. The pervasiveness of these models probably reflects, to a considerable degree, the constraints under which doctoral research is conducted as well as the state of research in the field of study generally.

Trends in Research Characteristics

In order to explore trends in research characteristics, the theses were grouped into three time periods: 1958-1971, 1972-1981 and 1982-1991. Proportions of studies with particular characteristics in each of the "decades" served as the basis for identifying specific as well as more general trends.

Specific Trends

A number of trends in relation to the various characteristics are evident over the three time periods. With respect to type based on purpose, the general trend was toward an increased emphasis on description and a decreased emphasis on exploring relationships. The trend in research strategies was toward an increasing proportion of case studies and a decline in the proportion of survey research. In relation to purpose and strategy combined, the trend was toward an increasing emphasis on descriptive case studies and descriptive surveys. The trend in methods of data collection was toward increased use of interviews, document analysis and observation with a concomitant decrease in the use of questionnaires. In general, the trend was away from quantitative toward qualitative data and associated methods of analysis as well as toward increased use of multiple methods of data collection.

These specific changes may be indicative of a more general shift in conceptions about the nature of research appropriate for doctoral studies in educational administration. There seems to be increasing variety in research strategies and methods. A fairly narrow view of research appears to be developing into broader definitions and alternative conceptions. However, established approaches are not disappearing entirely but, instead, are being supplemented by other strategies.

General Trends

A consideration of the variations in the theses suggests that they might be differentiated on the basis of three broad clusters of characteristics. The clusters reflect different emphases in basic purpose, research strategy, methodology and stance of the researcher as well as in substantive focus. For the purposes of this discussion, these clusters of characteristics will be referred to as "types" within a loose definition of the term. The types are specific to the theses that have been reviewed and may not be descriptive of the nature of doctoral research in the broader context.

The first type of doctoral study (Type A) is based on questions that have considerable practical import. Studies of this nature promise outcomes that have practical or social relevance. In other words, the research problems draw significance from the world of administrative practice. The purposes of the research project are presented in a form that suggests a descriptive or perhaps a relational study. Research strategies are likely to be surveys or case studies with appropriate reliance on either quantitative or qualitative data. Implicitly, the researcher adopts the general stance of an objective observer or analyst who will provide knowledge that has potential to increase understanding of a problem and possibly to offer some solutions. In general, Type A studies reflect the needs of a field of practice and probably are consistent with the characteristics of the earliest orientation to research in educational administration.

A second type of study (Type B) reflects an orientation associated closely with the theory movement. Essentially, the research problems have either theoretical or practical significance, or both. If the problem originates in the field of practice, then it is placed within an appropriate theoretical framework. Alternatively, the research problem may originate within a theoretical formulation, and any practical implications may be but the outcome of attempts to apply the theory. The primary purpose of the research may involve testing a particular line of theorizing or establishing the basis for developing a new conceptualization. Any one of a broad range of research strategies -- case studies, surveys, quasi-experimental designs, and others -- may be used. Implicitly, the general stance of the researcher is that of a "scientist" who is capable of bringing objective, conceptually-based and empirically-verified knowledge to bear on the solution of a problem.

The third type of study (Type C) may be viewed, in part, as a reaction to Type B research. Although based in the social and human sciences, the definition of science is much broader. The essential difference from Type B research is that understandings are developed more from the perspective of the participant than from that of an objective observer. There is some resemblance to Type A research in that the research emphasis is descriptive, but the nature of the understanding sought is different. The research strategies are likely to be case studies or multi-case studies using a variety of field research techniques. Essentially, the data collected are qualitative while the methods of analysis tend to be interpretive and hermeneutic.

All three types of research are evident in the doctoral studies that were reviewed; however, the boundaries are not as sharply delineated as the descriptions would seem to indicate. There is a considerable degree of overlap and blending of the types. Given this overlap, attempts to place individual studies into particular types might lead to distortions. Nevertheless, conceptualizing the research in terms of these three types offers a basis for interpreting the changes in emphasis over time.

Some of the research initiated in the early years of the Department reflects Type A characteristics. Studies that resemble Type B research gained prominence in the 1960s and 1970s. Type C studies emerged primarily in the 1980s and represent an increasing proportion of doctoral research. Nevertheless, examples of all three types are evident in recent years indicating the presence of pluralism in research orientations.

The emergence of Type C studies was preceded by some "erosion" in the canons of Type B research. The fairly systematic approaches involving explicit theorizing and hypothesis testing evident in earlier studies subsequently were replaced by less rigorous research strategies. In particular, fewer studies had a clear theoretical basis, and hypotheses were replaced by research questions which were addressed in a manner resembling hypothesis testing. In a number of respects, Type B studies began to resemble Type A studies.

Similar to the earlier influences of Type B on Type A research, Type C has also had an influence on Type B studies. This has generally taken the form of the addition of a qualitative dimension to strategies that previously were quantitative by using open-ended questions and supplementing questionnaire data with interviews or document analysis. But the interpretive character of Type C studies is generally lacking in these modified Type B studies.

A consideration of trends in terms of these three types suggests the possibility of other types. For example, to date there are no clear examples in this set of studies of a type of research that is based on a critical analysis of the practice of educational administration or of educational policies. However, such an orientation might emerge from the indications of an increased concern with the substantive aspects of policy issues and not just the processes through which the issues might be resolved. Perhaps the studies in emerging types of research will have, among other characteristics, a focus on educational issues with a normative dimension oriented toward change and improvement.

An interpretation in terms of these types of research suggests that the evolution metaphor may be appropriate for understanding the development of doctoral research in educational administration. As new clusters of strategies emerge, they serve to modify existing approaches and, consequently, change the overall character of the research without replacing totally the previous strategies, at least not in the short term. Whether emerging emphases will eventually change the fundamental nature of doctoral studies remains to be seen.

Research Areas and Themes

The seven topics or areas under which the results of the 330 theses have been summarized are indicative of the general nature of the research problems that have captured the interest of doctoral candidates. In some respects, the areas were imposed on a highly varied set of studies and suggest a more circumscribed boundary to the research than is actually the case. Nevertheless, the categorization provides one way of achieving a degree of synthesis of the outcomes of the research.

General Emphasis

The conceptual bases of the studies have been derived primarily from the social sciences or other areas of administrative studies. Only a limited number of theses have a conceptual base clearly linked to education or to the administration of *educational* organizations. In this minor category are studies of educational finance and planning, classroom interaction and supervision. Although the doctoral research rests on a variety of theoretical bases, a number of conceptual orientations are dominant. In particular, theorizing is frequently grounded in organizational studies, systems theory and policy processes.

More than one half of the studies relate to three areas: analyzing organizations, the relationship between individuals and organizations, and policy development and implementation. About one third of the studies are in the general areas of educational and organizational change, the context of educational administration and decision making. The least emphasis was given to research on administrators and administrative action. Interest in policy development increased dramatically across the three decades. The proportions of studies on change and on the individual and the organization also increased. In contrast, there was a decline in the proportions of studies on decision making and on the context of educational administration.

Although the specific themes identified in each area are diverse, they tend to share some common characteristics. An examination of the areas may suggest possible directions for future research by doctoral candidates. Accordingly, the summary comments and discussion revolve around how certain aspects might be developed further in order to enhance the programmatic character of the research. Although the observations are based on doctoral research conducted at a particular university, the directions proposed may have more general relevance.

Administrators and Administration

Noteworthy in the research conducted on administrators and administration, given the relatively small number of studies, is the variety in conceptual and methodological bases. Administrators and their work have been examined from the perspectives of formal conceptions of administration, role theory and various theories of leadership. Research strategies have ranged from surveys and structured observation to interpretive analyses. Perhaps because of this variety, no specific aspects of the area have been developed to an appreciable extent. The relatively low number of studies indicates that the processes of becoming an administrator and of performing effectively in the role have not attained high priority among alternative research topics.

A general objective of conducting research in this area seems to be that of enhancing knowledge about attaining successful and satisfying performance in an administrative position. Fulfilling this objective requires research into how prospective administrators become oriented to the role through formal and informal socialization, preparation, recruitment and selection processes. Although some questions have been addressed, many more remain unanswered. Increased efforts might be made to assess the influence of formal programs of study on the ability of administrators to fulfill their responsibilities. Additional research also seems to be warranted into factors associated with effective administrator performance.

The emergence of interpretive research strategies offers a promising avenue for further research in this area. Interpretive methodologies open possibilities for gaining insights into how administrators experience administrative positions, how they find meaning in the work and how appropriate preparation and professional development activities might help them to meet their challenges.

Context of Educational Administration

Studies in this area have drawn on legal, sociological and economic concepts appropriate for a particular problem. The general research methodologies tend to resemble those used in the basic disciplines. Both the legal and economic studies form lines of research with a consistent orientation over time and bear some of the characteristics of programmatic research. The themes are sufficiently well developed to permit assessments of progress and to serve as a basis for making decisions about possible future research thrusts.

The limited attention given to cultural factors suggests that there is room for much more research on this particular aspect of context. Perhaps the level of interest reflects, at least in part, a view of the cultural context as being shared and undifferentiated. Such a perspective provides limited impetus for analyzing the social and cultural context of education. Furthermore, the absence of an appropriate tradition in educational administration research probably tends to militate against studies designed to examine the interrelationship of education and culture. The general area holds considerable potential for critical analyses of the relationships among schooling and economic, social and political factors in ways that are more prevalent in other fields of educational research.

With relatively few exceptions, the data for the 330 doctoral studies were collected in Canada; consequently, the research reflects implicitly the effects of a particular context on various aspects of the administration of education. However, the explicit analysis of the relationship between that context and administrative processes, policies or structures has received only limited attention. There is need for additional studies that would explore explicitly some of the distinctive features of education in Canada as well as the interrelationship of those characteristics with the historical, cultural, economic, political, social and legal context. Such studies would contribute to the development of comparative, cross-national perspectives on educational administration. Within Canada itself there are sufficient variations across provinces to provide the basis for comparative studies of various aspects of context-administration relationships. In general, this area of research seems to hold considerable potential for further development.

Organizational Analysis

Research related to organizational analysis draws heavily on concepts and theories from the general field of organizational studies and applies them to schools, school districts, colleges and other organizations of interest to doctoral candidates in educational administration. Various versions of systems theory and specific lines of theorizing, such as that associated with bureaucracy, appear to have been highly influential in determining the direction of the research. Either explicitly or implicitly, many of the studies ask whether the conceptual models and methodologies developed for studies of private and other public sector organizations are applicable to educational organizations. Researchers have usually concluded that their results are supportive of the particular approach involved but sometimes also point to the desirability of modifications. Even if applicable, the generality of the conceptualizations seems to limit greatly the potential of the approaches for revealing some of the distinctive qualities and characteristics of schools, colleges or similar organizations. Consequently, both alternative conceptualizations of organizations and alternative research strategies have potential to enhance insights into the nature of educational organizations. Although there has been some movement in that direction, there are opportunities for the further development of qualitative, interpretive and critical studies of the organizations of interest to students of educational administration.

Research into the central processes of learning and teaching within schools and other educational organizations did not emerge as a major theme in the theses. The few studies that have been completed could be extended. Research into the interrelationship of structural variables has offered only preliminary insights into factors that might contribute to the effectiveness of organizations. Similarly, the research provides only limited bases for making decisions about the relative merits of alternative structural arrangements. In general, there is room for further research on the effectiveness of key processes, of various structural arrangements and of entire organizations.

Individual and Organization

As in the case of research conducted from an organizational analysis perspective, studies that tend to focus on the relationships between individuals and organizations have been influenced heavily by theorizing about organizations in general as well as more directly by the basic disciplines. Even when studies are grounded in psychological and sociological theorizing, results suggest that some relatively obvious characteristics of individuals such as position in the organization, tenure and gender have as much or more bearing on the relationship than more subtle factors.

The results of research in this area tend to leave the impression that there is a generally satisfactory quality to relationships between individual and organization. Although challenging, the relationships does not appear particularly stressful or unpleasant for organizational members. Levels of commitment and involvement tend to be high within a generally favorable climate. Nevertheless, the high expectations that members have for the relationship are seldom fulfilled completely. Most organizational members do not seem to receive as much from the organization as they expect, but they do not appear to be seriously disenchanted. To what extent this is an accurate description of the situation and to what extent it reflects the nature of the conceptualizations on which the research is based is unclear. Perhaps if other questions were asked within different conceptual frameworks, there would be greater evidence of conflict and pressure for change.

Of particular interest in the research into the dynamics of organizational life is the increasing number of studies reflecting qualitative and interpretive strategies. The emergence of an emphasis on such strategies reflects a shift away from an objectivist stance toward examining the relationship more from the perspective of the individual. Further studies may reveal the reasons for the apparent harmony as well as sources of some stresses and strain in the relationship.

Educational and Organizational Change

Research in this area tends to focus on the dynamic aspects of educational organizations. Because of the varied themes that were grouped together, studies in the general area also have varying conceptual bases. Research on educational development tends to have a strong historical emphasis, although this varies to some extent across studies. The emphasis contrasts with the ahistorical nature of much of the research in other areas and suggests the possibility that more attention could be given to the historical dimension in those other areas. Also, the impact of the cultural context on education that was not emphasized in studies in other areas is more evident in this one.

Although relatively few in number, the evaluative studies suggest the possibility of more extensive research into assessing current practices and testing alternatives. Given that educational administration is an applied field, research into educational change and evaluation holds special significance. New emphases in research strategies might be developed in order to address more directly the question of what changes are needed or desirable in educational organizations.

Research into the more interpretive aspects of change processes has been initiated only relatively recently. This focus recognizes the individual's experiences and meanings as an important element in change. There are possibilities for more intensive interpretive studies as well as for combining historical and critical interpretive methods in research on change.

Decision Making

On the basis of the procedures followed in this research review, decision making emerged as the unifying theme for thirty-seven studies. The amount of research activity appears to exceed that in other areas associated with administrative processes such as leadership. However, the number of studies should not be surprising given that for some theorists decision making is synonymous with administration. Research on participation in decision making and on the distribution of authority to make decisions reflects an interest in democratizing decision making. Some of the studies have attempted to address the difficult and persistent questions of who should be involved and in what manner. Results of the studies confirm the centrality and the complexity of decision making processes.

The studies are based on a variety of conceptual and methodological strategies, but generally the research has been quantitative in nature. This tendency opens the question of the potential of other research strategies for addressing the perennial questions from different methodological perspectives. Interpretive and critical examinations of involvement in decision making would seem to be promising avenues for further research. Attention might also be given to examining how the broader cultural context impinges on decision processes.

Policy Development and Implementation

Studies into policy development and implementation constitute a major research area that has emerged in recent years. The research reflects an increasing interest in major decisions about the operation of educational organizations. Noteworthy in the results of the research is the limited evidence of conflict. Most policy issues seem to be resolved more readily than might have been anticipated. Whether this characteristics is an artifact of the theories on which the research is based and the methodology applied or whether this is an accurate indication of the nature of the processes involved remains unclear. A growing body of case studies holds the promise of providing a basis for consolidating results into a broader perspective on policy processes.

Approaches to research on educational policy reflect a heavy emphasis on the application of theories or models from the policy sciences. Only a limited amount of interpretive and critical analysis has been involved in completed studies. Most of the research has been retrospective and has focused on processes. Until recently, limited attention was given to the examination of substantive issues. There are indications of an emerging interest in the substance of policy issues and also in exploring areas where policy initiatives may appear to be necessary or desirable. Various indicators suggest that researchers are becoming more sensitive to the normative aspects of policy studies. The increased attention to the substance of policy and to the alternative ways of resolving issues has potential to enhance the contribution that doctoral research can make to improved practice.

Concluding Comment

In the doctoral theses reviewed, the researchers investigated a wide range of research problems in a variety of substantive areas through the application of a number of different methodologies. The research was conducted within the context of an evolving field of study. To some extent, the characteristics of the studies serve as indicators of the nature and state of research conducted within educational administration in general. Initially, some of the studies reflected the influence of the theory or social science movement, but the effects of subsequent questioning of various modes of theorizing and of conducting research are also evident. Changes in emphasis over time are indicative of the dynamic aspect of research in educational administration. The exploration of a variety of topics and methodologies can be taken as indications of vitality in the field of study. But the dynamic character of the research is also related to some challenges.

Mention was made in the introductory chapter of the problems posed by the increasing diversity and fragmentation of research effort for developing the study of educational administration. The review of the doctoral theses completed in one department confirms the challenges associated with the attempt to synthesize a varied area of research. Clearly, the variety would have been even greater and developing a synthesis would have been even more challenging if the scope of the review had been wider. Nevertheless, the outcomes of the project suggest that both the appearance and reality of fragmentation might be reduced by increased efforts to consolidate research into various areas and along various themes. Of course, the problem can be alleviated significantly only at the research development stage and not retrospectively. More individual researchers would have to be willing to design their studies in a manner that would extend established or emerging lines of research if the basic problem is to be addressed.

The fragmentation of the field of study is linked to the diffuseness of research effort. In the theses that were reviewed, the researchers generally did ground their studies in the literature on a particular topic. However, the review leaves the impression that linkages with the research in the basic disciplines and related fields were emphasized more than were linkages with theses completed in the department. Such conceptual and contextual grounding is, of course, highly important. But given the limited scope of doctoral theses, there would seem to be merit in linking individual studies more directly to areas of research within a department. Perhaps the review may serve to indicate that individual research projects gain significance when placed within the context of a line of research and may encourage future researchers to take this into account in designing studies. Increased readiness to build connections among studies might lead, over time, to significant advances in particular areas.

The suggestions that relate to developing lines of research have implications for defining and delimiting the boundaries of the field but are not intended to constrain the application of a variety of research methodologies. Although there was some variety in approaches to doing research in the theses reviewed, only a relatively few methodologies were emphasized. This is probably characteristic of educational administration research in general; the diversity resides more in research areas than in approaches to doing the research. Perhaps future researchers collectively might subject a more limited range of substantive areas to more varied forms of investigation. A variety of theoretical and methodological orientations focused on a more limited number of topics may help to overcome the diffuseness of the research effort that inhibits the development of the study of educational administration. The problem of fragmentation would be alleviated by a willingness to use more varied research strategies within a delimited area.

A major objective of the author will have been achieved if this monograph encourages some doctoral students to build on the work of predecessors and stimulates them to participate in the development of the field of study while pursuing their specific research interests. The twofold purpose need not be confining. Doctoral studies have the potential to be programmatic in terms of research problems as well as both creative and evolutionary in approaches taken to conducting investigations.

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Some information about each thesis is presented within the four sets of parentheses that follow the title. A blank space within parentheses indicates that the information was not available or could not be determined.

The first three sets of parentheses provide information on the nature of the study. The contents of the first parentheses identify the category of research purpose into which the thesis was placed. Accordingly, the entries describe the thesis with one of, or a combination of, the following terms: descriptive, relational, evaluative, developmental, conceptual or methodological. The term in the second set of parentheses identifies the type of research strategy: survey, case, case/survey, comparative, experimental, panel or causal-comparative. The upper case letters in the third set of parentheses identify the methods of data collection used according to the following key: D - documents, I - interview, O-observation, Q - questionnaire and R - records.

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